# 2.0 - Project Description



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#### 2.1 INTRODUCTION

DTSC is considering the issuance of a full Hazardous Waste Facility Permit to Romic that would authorize the company to continue to operate, and to conduct certain upgrades, expansions, and modifications to the facility. This action is being conducted pursuant to California Health and Safety Code (H&SC) §25200 and Title 22, California Code of Regulations (Cal. Code Regs., tit. 22), div 4.5, chapter. 20. The following provides a description of those existing activities and proposed upgrades, expansions and modifications pursuant to Romic's request.

#### 2.2 NEED FOR THE PROPOSED PROJECT

The 1986 State Hazardous Waste Facility Permit issued to Romic for its hazardous waste treatment activities expired in May 1991. Romic received a ten year federal Resource Conservation and Recovery Act (RCRA) permit from the United States Environmental Protection Agency in 1992 for storage activities. Pursuant to the Cal. Code Regs., tit. 22, § 66270.51, Romic is authorized to continue operating the facility because it submitted a Permit Renewal Application to DTSC prior to the expiration date of the state and federal permits.

Romic needs DTSC approval of the Permit Renewal Application to allow the facility to continue to operate, and to conduct certain upgrades, expansions, and modifications to the facility in order to be consistent with the current provisions of the H&SC, div 20, chapter. 6.5, and Cal. Code Regs., tit. 22, div 4.5 and to meet changing market demands. All state and federally regulated hazardous waste activities are now included in a single proposed DTSC Permit.

# 2.3 PROJECT OBJECTIVES

The CEQA Guidelines (Cal. Code Regs., tit. 14, §15124(b)) require the EIR to include a statement of objectives sought by the proposed project. The objectives of the proposed project are as follows:

- To ensure that Romic can continue to provide a viable service for the safe and effective storage and treatment of hazardous wastes generated by businesses within and outside the State of California.
- To ensure that Romic can conduct necessary modifications to its facility to meet ever-changing market demands.
- To continue to provide a regional treatment, storage, recycling and transfer facility for the California generators for processing certain identified hazardous waste, most of which currently are authorized to be accepted at the Romic facility under existing permit conditions.

#### 2.4 DESCRIPTION OF EXISTING FACILITY

For the purposes of the EIR, it is important to determine the activities that are currently permitted because they define the environmental baseline or setting conditions. The physical description of the current site configuration including buildings and waste management areas are described under section 2.4.1. The existing authorized activities are described under section 2.4.2. In addition to the permitted activities, other activities that occur at the facility which are not part of the project are described in section 2.4.3. Together, these descriptions of the existing facility will provide an understanding of the level of construction and operations of the proposed project.

#### 2.4.1 Physical Description of the Facility

The Romic facility is located on an irregularly shaped site of approximately 14 acres that connects to Bay Road within the City of East Palo Alto (Figure 2-1). A paved driveway that is approximate 480-feet in length provides access to the site from Bay Road. The site is paved throughout, except for a narrow strip of unpaved area along the perimeter and a gravel parking area near the Bay Road entrance. The site is sloped to capture drainage and is underlain by a system of drains and sumps. Resource recovery is the primary operation at the facility and the types of resources recovered are shown in Figure 2-2.

#### 2.4.1.1 Primary Site Areas

The Romic facility consists of four main areas, with buildings and structures arranged as shown on the site plan (Figure 2-3):

- Office and laboratory buildings
- Production/process area
- Storage buildings
- Support areas, access and parking

Hazardous waste operations are conducted primarily in the central portion of the facility, which includes warehouses for storing and handling hazardous waste, tank farms, distillation processing equipment, a fuel blending facility and a field services chemical warehouse. On the south-central portion of the facility is the wastewater treatment system. Office buildings, laboratory and parking lot are in the eastern portion of the site near the site entrance. Truck and facility maintenance buildings are in the west area of the site. In addition, there are designated areas for access and parking at various locations throughout the site.

# 2.4.1.1.1. Office and Laboratory Buildings

Three office buildings and a laboratory are located in the entry area of the facility (Figure 2-3). The largest of the three structures is an office building adjacent to the main driveway (Office Building # 2). Office Building # 2 has been used for administrative and support functions, but is currently largely unoccupied. A second office building is at the north end of the driveway (Office Building #1). Office Building #1 currently houses operations management, administrative, and support functions. A laboratory (Office/Lab Building #3) also is located in this area, west of Office Buildings #1 and #2. There is a temporary structure used as portable offices southwest of the laboratory. The vehicle maintenance building in the southwest area of the facility houses maintenance, engineering, and transportation services.

#### 2.4.1.1.2 Production/Process Area

The Production/Process Area is located in the central portion of the facility and contains Tank Farms A, B, CLR, D, G, H, I, J, MNO, and Q (Figure 2-4). These tank farms provide storage for both raw materials (unprocessed hazardous waste) and processed materials (treated hazardous waste). The Production Area is located down the center of the tank farms. The equipment for the recycling of solvents, such as distillation columns, vacuum pots, and thin film evaporators, are located in this area.

Tank and process vessel systems include waste storage and treatment tanks and tank-like waste treatment process vessels. Romic stores and treats waste in several tank systems with various tank configurations. The tanks typically are operated at atmospheric pressure, although many vessels associated with solvent recycling can operate under partial to full vacuum. Hazardous waste storage tanks are equipped with vents to avoid excessive positive or negative pressures in the tanks during loading, unloading and process operations. Tanks are constructed of materials that are compatible with the wastes to be stored. Romic uses a combination of sealed tanks with conservation vents, pressure relief valves and a vapor recovery system to control volatile organic compounds (VOC) emissions from the tank systems.

The DTSC-regulated and unregulated tanks and process vessels currently utilized at Romic are described below. Specific tanks and processes are described in Table 2-3.

**Cone-Bottom Tanks:** Carbon steel tanks that receive the majority of wastes handled by Romic. These tanks are designed and operated to allow the primary settling and separation of sludges in the tanks.

**Slope-Bottom Tanks:** Used primarily for storage. They may receive wastewaters, solvents, oils and fuel blending waste. Also used as receiving tanks for incoming waste streams. The sloped bottom design facilitates complete removal of waste from the tank.

**Dished Tanks:** Used in two main process areas: the fuel blending operation and the hazardous waste treatment equipment associated with distillation operations.

**Flat-Bottom Tanks:** Used primarily for industrial wastewater treatment. Receive wastewaters with some organic content and treat the waters with activated sludge to reduce the organic contamination.

**Plastic Tanks:** Flat-bottomed tanks made from cross-linked and linear-linked high-density polyethylene (HDPE).

**Lined Tanks:** Used for corrosive wastes and lined either with epoxy coating or with rubber.

**Neutralization Portable Tanks:** Used to handle corrosive hazardous wastes that will be managed in the neutralization system. Made of cross-linked high density polyethylene.

**Fractionators:** Upright cylindrical vessels. Operated at a controlled pressure and temperature to separate one or more chemical constituents based on their relative vapor pressures.

**Thin Film Evaporators:** Vessels with a motorized wipe assembly that spreads waste onto the heated wall allowing lighter components to evaporate.

**Vacuum Pots:** Dished or cone-bottomed vessels with internal heating coils. Waste is heated, and the lighter components partition into vapor.

The tanks and process vessels are located within identified containment areas (tank farms, production area, liquefaction area), shown on Figure 2-4. The tank farms are bounded by concrete berms or walls. Each containment area is large enough to hold the accumulation of a 25-year, 24-hour rain event, plus either the contents of the largest tank or 10 percent of the total capacity of all tanks in the containment area. Any accumulated liquids in a containment area would be observed via tank and containment area inspection procedures and by the regular presence of facility operators. Any liquids or spills are removed as soon as possible, but within required regulatory time limits. Rainwater accumulations are visually inspected and transferred to an appropriate tank.

The main process tanks comprising the wastewater treatment system are located in Tank Farm K, south of the Production Area. The process tanks in Tank Farm K include equalization tanks, aerators, activated sludge reactors, and clarifiers. The process handles water received or generated at the facility by internal uses or upstream treatment processes. Adjacent to Tank Farm K is a 500,000-gallon rainwater tank that is used for the collection of site rainwater. The first 20,000 gallons of runoff from each rain is collected and treated in the wastewater treatment system. The storm water is tested and discharged to the Palo Alto Regional Water Quality Control Plant (PARWQCP) or, if necessary, treated to meet discharge limits set in Romic's permit from the PARWQCP. This latter activity is not regulated as hazardous waste treatment.

# 2.4.1.1.3 Storage Buildings

These areas are used to store hazardous wastes that will be processed onsite and to store hazardous wastes that will be transported offsite for processing. Waste management units for waste receipt and container storage are provided in the northern portion of the site, at the North, South and West Storage Buildings, drum sampling area and in roll-off containers. These waste management units are described in detail in the Part B Permit Application, Section XIV-Engineering Design dated August 1989. The storage buildings are corrugated metal structures that are open on one, two or three sides, with passive secondary containment systems. The configurations of these structures provide shelter from sun and rain, access for control of fires and spills, and adequate ventilation.

The container storage areas are designed to contain hazardous waste and other hazardous materials in containers such as drums, sacks, tri-wall boxes, and totes. All of these containers must meet the U.S. Department of Transportation packaging requirements. In accordance with Cal. Code Regs., tit. 22 §66264.175, secondary containment for each container storage area must contain at least 10 percent of the combined capacity of the containers or the total volume of the largest container, whichever is greater. In accordance with Uniform Fire Code §8003.1.3.3, secondary containment areas must also have the capacity of the design flow from the sprinkler system for a period of 20 minutes.

Two Drum Crushers are located in the North Storage Building; one along its northern edge (Figure 2-4), and another on its southern wall. Adjacent to the North Storage Building is the South Storage Building and the Sampling Area, where container sampling and storage activities take place. Adjacent to the Sampling Area is the drum pumping area, which is used for transferring liquid from drums to tanker trucks.

West Storage Building #1 (West #1) is located adjacent to Tank Farm Q, and is separated into two compartments. A lab pack consolidation area is located within the

West Storage Building #2. The lab pack area is equipped with an adjacent 23,000 cubic feet per minute (cfm) vapor scrubber unit that is designed to remove organic and inorganic contaminants from the air. Three 20,000-gallon sewer discharge batch tanks are just north of this building. They hold water to be tested and discharged to the Palo Alto Regional Water Quality Control Plant.

The storage area dimensions are as follows:

AREA	DIMENSIONS		
North Storage	50' x 100'		
South Storage	78' x 170'		
Sampling Area	74' x 124'		
West #1	30' x 60'		
West #2	65' x 125'		

# 2.4.1.1.4 Support Areas, Access and Parking

The building at the southwest corner of the property provides housing for truck maintenance, plant maintenance and engineering (Figure 2-3). A truck wash is located adjacent to the rainwater holding tank, near the southerly site boundary (Figure 2-4). As part of the proposed project, washout of bulk tanker or vacuum trucks (see Section 2.5 – Proposed Changes/Additions to Existing Facilities) will be performed to meet the Cal. Code Regs., tit. 22 § 66261.7 definition of empty.

The Romic facility has a narrow driveway that extends to Bay Road and provides vehicular access to the site (Figure 2-3). A six- to eight-foot chain link fence and block wall topped with three strands of barbed wire surround the facility, with a video-monitored electronic security gate across the driveway from Bay Road (South Gate # 1). Two gates near the end of the entry driveway are inactive, two gates are on Tara Road at the western edge of the site (# 8 and # 9), and two gates (# 6 and # 7) are located at the north end of the site. A gravel parking area is near the facility entrance on Bay Road, and truck parking is provided along the southerly site boundary.

# 2.4.2 <u>Facility Operations</u>

Romic receives and processes a variety of liquid and solid hazardous waste under various federal US EPA (RCRA) and California-only (non-RCRA) waste codes (Tables 2-1 and 2-2). Hazardous waste shipped to Romic for recycling and treatment comes from such industrial sources as:

- Dry cleaning
- Printing
- Electronics
- Aerospace
- Paint
- Automotive

Romic also receives household hazardous waste from household waste collection events in the San Francisco Bay area and universal waste that includes florescent lamps, thermostats, electronic devices, etc.

Specific examples of hazardous waste managed at the facility include halogenated and non-halogenated solvents, Freon and Freon substitutes, waste oils, waste antifreeze, sludges, oxidizers, corrosive wastes, resins/adhesives, debris/solids, soils, wastewaters, resin bed media, paints, and lab packs.

On average, Romic receives approximately 35,000 tons/year of both RCRA and non-RCRA hazardous waste, or about 17% of the permitted capacity of the facility (231,840 tons). Table 2-12 shows the amount of hazardous waste received by Romic as a percentage of the permitted treatment capacity for the years 1993 – 2003.

RCRA hazardous waste represents approximately 62% of the total annual volume of waste received by Romic. The majority of this RCRA hazardous waste is designated "ignitable" (39%). The remaining volume consists of waste solvents (7%), waste with low levels of metals (7%), low levels of organics (4%), corrosives (4%), and surplus chemicals and others (1%). Table 2-13 shows the average percent of hazardous waste received by Romic based on federal waste codes for the years 1993 – 2003.

Non-RCRA hazardous waste represents approximately 38% of the total waste volume received by Romic on an annual basis. In addition to the federal waste codes, hazardous waste is also identified by California waste codes. The majority of this hazardous waste consists of liquid "organics" (38%). The remaining volume consists of waste anti-freeze (21%), corrosives and inorganics (18%), solids (12%) and other wastewater (11%). Table 2-14 shows the average percent of hazardous waste received by Romic based on California waste codes for the years 1993 – 2003.

The majority of RCRA-designated ignitable waste, and waste solvents (46%), and the majority of the non-RCRA waste designated as organic liquids, and inorganic waste (56%) are blended and shipped off-site to cement kilns as a supplemental fuel source. Some of the wastes that are blended are the by-products of distillation, thin-film evaporation, or liquefaction treatment. A portion of the non-RCRA waste designated as waste anti-freeze (11%) and a portion of the RCRA waste designated as solvents is recycled, and shipped off-site to end-users. Table 2-15 shows the amount of hazardous waste shipped off-site by Romic as a percentage of hazardous waste received for the years 1993 – 2003.

The remaining volume of liquid and solid hazardous waste received by Romic is either wastewater that is treated and discharged into an industrial waste discharge line, corrosives that are neutralized, or solid hazardous waste shipped to an authorized off-site disposal facility. Such wastes include wastewater from recycling operations, solids from repackaging or consolidation operations or waste that is stored for transfer to another authorized hazardous waste facility.

Figures 2-5 and 2-6 provide schematic diagrams depicting the various treatment operations existing at the Romic facility. The following waste management activities are authorized and are currently being conducted at Romic. These activities would continue to be conducted after the proposed project is approved.

# 2.4.2.1 Waste Handling

This section provides an overview of waste handling procedures at Romic. A more detailed discussion may be found in the Part B Permit Application, Section III – Waste Analysis Plan dated August 1989.

#### 2.4.2.1.1 Prior to Delivery

Specific procedures are required before a waste can be brought to the Romic facility. Because Romic is permitted to handle only certain waste categories, the first procedure is to determine if a particular waste can be accepted. A generator (customer) who wants to send waste to Romic must complete a detailed waste characterization form (waste profile). This waste profile explains what the waste consists of, how it was created, its physical and chemical characteristics, and other information. The generator submits this waste profile, and if requested, a sample of the waste to the Romic laboratory for analysis before the waste can be delivered to the facility.

Romic laboratory technicians then follow specific procedures to determine whether the types and amounts of substances present in the waste sample are those that Romic is permitted to accept. They also determine such characteristics as heat value, metals

content, how much product can be recovered, and other information that assists in processing the waste. The analysis determines whether or not Romic is permitted to accept the waste, how it should be processed to recover the greatest amount of product, and the cost to the generator.

In addition to the laboratory, four other departments may be involved in the decision to approve a waste before it is accepted. The health and safety manager may be called upon to evaluate waste profiles to determine if any health and safety issues need to be considered. Other departments involved in the approval process are customer service, environmental and operations. If the analysis and evaluations are satisfactory, the generator is notified to schedule a pickup/delivery time with Romic. If the waste cannot be accepted, the generator also is notified.

# 2.4.2.1.2 Waste Delivery and Sampling

Wastes are transported to the facility by properly licensed hazardous waste transporters and arrive in 5- to 30-gallon cans, 55-gallon drums, 110-gallon to 350-gallon totes, 10 cubic yards to 40 cubic yard roll-off containers and tank trucks. When the waste is received, the California hazardous waste manifest is checked to verify that it is complete, accurate and that the load was approved and scheduled (out-of-state generators are required to use a California uniform manifest). Wastes received are sampled and analyzed to evaluate their chemical and physical properties, and conformity with the manifest. The results then are compared to the pre-receipt analysis. If there are discrepancies, they are resolved with the generator before the waste is accepted for treatment. All containers manifested to the facility are inspected and assigned a unique tracking number, which is marked on the container, using a bar code label. The containers may be stored within a designated storage area prior to transfer to the assigned process area. The storage areas are equipped with secondary containment and are designed so that incompatible wastes are segregated.

# 2.4.2.1.3 <u>Waste Treatment and Temporary Storage</u>

After analysis and approval, container loads and bulk loads (tanker trucks) are off-loaded at the appropriate areas for temporary storage or for treatment. On average, ninety-nine percent of bulk loads are unloaded into tanks within two hours of completing the waste receiving process. Drums are typically stored less than two weeks before the stored wastes are processed. Other wastes are temporarily stored in accordance with applicable federal and state regulations prior to processing, treatment and/or shipment offsite.

Areas where liquids are stored in storage tanks and drums are built on 6 inches or more of impermeable concrete and are surrounded by berms or low walls. This provides secondary containment in the event of an inadvertent release. Any spill is contained within the walled concrete area until removal.

# 2.4.2.1.4 Onsite-Generated Hazardous Wastes

Onsite processes result in the generation of hazardous waste. Onsite-generated hazardous wastes include:

- Used oil (from vehicle maintenance)
- Laboratory wastes
- Universal wastes (lights, batteries, CRTs)
- Lead-acid batteries
- Non-empty containers of process chemicals

These waste streams may be managed onsite in one or more 55-gallon drums, 40-cubic yard bins or other containers, as appropriate. Some onsite-generated waste streams may be consolidated with offsite wastes. For example, certain laboratory wastes may be consolidated with similar wastes for fuel blending or other processes.

#### 2.4.2.1.5 Management of Offsite Waste Process Treatment Residuals

A broad range of wastes may be sent for offsite hazardous waste management, subject to acceptance criteria of the offsite facility. Wastes may be sent offsite for incineration or for treatment and/or land disposal. Examples of wastes sent offsite for incineration are aqueous wastes that cannot be treated at Romic, surplus chemicals and contaminated soil. Examples of wastes sent offsite for treatment and/or land disposal are wastewater treatment sludges, non-RCRA process residuals, spill cleanup materials and empty containers. Process treatment residuals are managed in the same manner as wastes received from outside the facility and are subject to off-site hazardous waste management standards.

#### 2.4.2.1.6 Universal Wastes

Universal wastes are consumer items that meet the definition of hazardous waste but are subject to an alternative set of management standards in lieu of hazardous waste permitting regulations. Universal wastes (such as fluorescent light bulbs, thermostats, batteries and aerosol cans) received at Romic are not sampled for analysis. If a waste is received under a hazardous waste manifest, Romic may re-characterize the waste to a universal waste based on visual observation or through contacting the generator to update the waste profile information.

#### 2.4.2.2 Waste Treatment Processes

Romic reclaims, recycles, treats and stores hazardous waste using a variety of management options. The processes described below are described in detail in Romic's Part B Permit Application, Section XIV – Engineering Design dated August 1989.

**Solvent Recycling**: Used thinners and solvents (e.g., lacquer thinner, ethanol, acetone, mineral spirits) are recycled. Impurities are removed by distillation processes, resulting in usable products

for resale to customers. The need for virgin solvents and the volume of wastes requiring disposal therefore are reduced.

**Fuel Blending:** Romic recycles organic waste of sufficient heat content by mixing them to produce a fuel product suitable for use by authorized boilers and industrial furnaces. This fuel is shipped to cement kilns and burned in place of oil, natural gas or coal. The desired parameters for this alternative waste fuels are specified by each receiving facility.

**Liquefaction:** Solid and semi-solid materials are blended with liquid material (e.g., diesel fuel, solvent) to achieve a liquid consistency for use in the fuel blending process described above.

**Neutralization/Metal Recovery:** Acidic and caustic (basic) wastes are treated until they achieve a neutral pH. The neutralized waste streams may receive secondary industrial wastewater treatment to remove organic contaminants.

Wastewater Treatment: Wastewaters from onsite or offsite that are contaminated with organic and/or inorganic substances are treated to meet local sewer agency discharge limits. Various treatment techniques are used, including distillation, biological treatment, filtering and ultra-violet oxidation. The treated wastewater is discharged under permit to the Palo Alto Regional Water Quality Control Plant.

**Ethylene Glycol Recycling**: Used ethylene glycol (e.g., antifreeze) is distilled to achieve a useable product for resale/reuse.

**Small Container Management (Lab Packing)**: Romic receives and re-packs and/or consolidates small quantity chemicals (e.g., outdated chemicals, lab packs) that either are processed onsite or sent to licensed facilities for appropriate treatment or disposal.

**Offsite Transfer:** Collection and storage of hazardous wastes that have been manifested and received by Romic but will not be processed by the facility. This occurs with an estimated 5 percent of hazardous waste received.

**Consolidation:** Consolidating containers of solid hazardous waste resulting in a bulk waste stream for offsite recycling, treatment or disposal.

# 2.4.2.3 <u>Environmental Control Systems</u>

Environmental control systems are in place to provide for uninterrupted facility operations in accordance with safety procedures, regulations and permits. Romic maintains and implements an inspection plan to detect, prevent and respond to malfunctions, deterioration, operator error and/or unplanned discharges. Facility design also provides for the collection and treatment of rainwater, plus any accidental spills or releases, to assure these substances remain onsite until it is determined they are properly handled and treated if necessary. No changes to facility environmental control systems are warranted as part of the proposed project.

#### 2.4.2.3.1 Runoff and Spill Control

Facility design and operational procedures provide runoff and spill control that contains fluids within the project site. A detailed discussion may be found in the Part B Permit Application, Section XIV- Engineering Design dated August 1989. In general, spill containment is provided for all storage and processing areas. Containment is provided in accordance with DTSC regulations, with sufficient capacity to hold either the volume of the single largest container or tank, or 10 percent of the aggregate volume, whichever is greater, plus precipitation from a 25-year, 24-hour storm event. Containment structures are constructed of reinforced concrete and are required to be impermeable.

The design and operational procedures in place assure that onsite fluids are collected, analyzed and, as appropriate, treated to assure that discharged water is in compliance with requirements of the Palo Alto Regional Water Quality Control Plant (PARWQCP). The active waste handling and auxiliary area (such as truck parking and maintenance) is paved primarily with reinforced concrete, with limited areas of asphalt, and is graded to low points, thereby preventing runoff. Spills, releases and rainwater drain to catch basins located in these low points and flow into the facility containment system. The containment system enables the drainage to be transferred to an appropriate tank or container. From here it is analyzed and either discharged to the PARWQCP or transferred to the wastewater treatment system for processing and subsequent discharge to the PARWQCP. The facility containment system has sufficient capacity to handle the full capacity of the largest tanker truck (6,000 gallons), plus collected rainwater. This assures that, in the event of catastrophic failure of one or more tanker trucks, no hazardous waste would leave the facility.

Rainwater (stormwater) that falls on the site is collected by the facility containment system. The active area of the facility is sloped to contain precipitation falling within the area, thereby preventing runoff. The first 20,000 gallons of each rain event is collected and processed through the facility wastewater treatment system. It is then discharged to the Palo Alto Regional Water Quality Control Plant. Subsequent stormwater is collected in the 500,000-gallon rainwater tank.

Specific unloading/loading procedures are used to prevent hazards and ensure containment in the event of a spill of containerized wastes or bulk materials, such as liquids in tank trucks. Facility personnel involved in the unloading/loading of waste are instructed in the proper operational procedures and use of equipment necessary to prevent hazards.

Associated procedures prevent runoff from tank and process containment areas and from container storage areas. The containment capacity for each tank farm area is large enough to hold precipitation from a 25-year, 24-hour storm, plus 10 percent of the

aggregate capacity of all tanks in the containment area or the contents of the largest tank pursuant to Cal. Code Regs., tit. 22, § 66264.192. Each container storage and handling area can adequately contain precipitation and/or leakage from drums. Container storage areas are designed in accordance with Cal. Code Regs., tit. 22, § 66264.175 to contain at least 10 percent of the combined capacity of the containers or the volume of the largest container, whichever is greater. In addition, in accordance with § 8003.1.3.3 of the Fire Code, containment provides for the capacity of the largest container plus flow from the sprinkler system for a period of 20 minutes.

Secondary containment systems prevent releases to the environment or endangerment of public health. Spilled or released waste and accumulated precipitation are removed within 24 hours or less. The collected material is managed as hazardous waste unless it is determined to be non-hazardous. The facility secondary containment systems are passive designs and function without power. As a result, in the event of a spill, even with a power outage, spilled wastes will be contained within sumps and containment structures. The sump systems at the facility are manually operated. There is also a backup 300-KVA generator, which is automatically activated in the event of a power failure. Equipment used for response to spills and other incidents is readily available and inspected regularly for access and operability. Spill response equipment, including absorbent materials, overpack drums, air respirators, and protective clothing and hand tools, are stored in various locations throughout the facility. Mobile equipment, such as portable pumps and forklifts, also is available for use.

### 2.4.2.3.2 **Emissions Control**

Emissions from the facility primarily result from its recycling and treatment operations, with some additional emissions from ancillary operations (such as fuel dispensing, drum liquefaction and washing, and truck washing). Because no dust-generating operations occur at the facility, most emissions are associated with volatilization loss during material handling and processing. Some emissions also result from the facility's natural gas-fired boiler.

The processing sources of emissions include waste receiving and handling, fuel blending operations, waste solvent purification operations, wastewater biological treatment and storage tanks. Estimates of emissions of volatile organic compounds (VOCs) from processing operations, ancillary operations and soil gas are based on emissions testing data, regulatory agency documents, material throughput information, and facility process information and engineering models.

Control technologies, including those applied to the process boiler, are used at the Romic facility to reduce emissions from treatment and process equipment. These technologies typically employ scrubbers and thermal oxidation processes to reduce emissions.

# 2.4.2.4 Site Security and Safety

# 2.4.2.4.1 Access Control

Romic is not open to the general public and it has an established security program to minimize and prevent unauthorized entry. Entry is limited to facility personnel, licensed waste haulers, contractors and escorted visitors on a 24-hour basis. The facility is surrounded by a six- to eight-foot-high chain link fence and block walls topped with three strands of barbed wire. Entrances and exits (four controlled human-access points, plus the main entrance on Bay Road) are located to control traffic flow, limit access and provide emergency egress. A locking, electronic gate on the entrance controls vehicular access to the facility from Bay Road. Access through the gate is obtained via a telephone located outside the gate or through remote "garage door" type clickers or best available technology. Vehicles in front of the gate can be observed via closed-circuit television.

Warning signs printed with Caution – Hazardous Waste Area – Unauthorized Personnel Keep Out are posted on facility gates and along the perimeter fence. The signs are printed in English and Spanish, and are legible from a distance of 25 feet.

# 2.4.2.4.2 Facility Inspection Plan

Romic utilizes a facility-wide inspection plan to protect human health and the environment by detecting, preventing and responding to malfunctions, deterioration, operator error and unplanned discharges. The inspection schedule is kept in the facility operating record and is based on operating experience and engineering knowledge. Inspections address safety and emergency equipment, security equipment, operational equipment, container storage areas, load/unload areas and tank systems.

#### Inspections occur as follows:

- Safety and emergency equipment: Weekly, monthly, semiannually, annually, biannually and as it is used.
- Security equipment: Monthly to prevent unauthorized access to the facility, ensure warning signs remain posted and ensure the facility is properly lighted.
- Operational equipment: Regularly scheduled servicing and before use.
- Sumps and secondary containment structures: Visually inspected daily.
- Hazardous waste container storage and processing areas:
   Weekly for leaks, spills, proper stacking arrangements, aisle spacing and segregation of incompatible materials.
   Containers also are inspected.
- Hazardous waste tank storage and processing systems:
   Daily for signs of corrosion, weld breaks, punctures, spills and secondary containment erosion or deterioration.
   Annually, or as advocated by engineering analysis

recommendations, American Petroleum Institute Standard 653, and 1997 Uniform Building Code.

# 2.4.2.4.3 Personal Safety

The plant is illuminated at night by automatic outdoor lighting. Also, internal communications occur via two-way radios, and warning signs are present at key locations. The plant is equipped with a facility-wide telephone system with public address loudspeakers. Each telephone is capable of direct dialing to emergency response personnel (police, fire, ambulance). Intercom/paging and emergency response numbers are posted throughout the facility.

Most process systems have alarm panels with audible warning alarms. The alarms sound when control parameters deviate from preset operating conditions or reach a desired set point. Alarms are set to allow operators sufficient time to make adjustments or shut down processing equipment before operating conditions become dangerous.

Personal protective equipment (PPE) is provided to facility employees to prevent undue exposure to hazardous waste. The PPE includes hard hats, safety eyewear, acid/organic cartridge respirators, ear protection, coveralls, PVC rain suits, gloves and steel-toed boots. First aid kits and incident response equipment are readily available. Emergency showers and eye wash stations are installed throughout the facility.

Visitors to the facility sign in at the front desk, are issued visitor passes and are escorted by facility personnel while in hazardous waste management areas. If necessary, visitors are provided with appropriate PPE.

#### 2.4.2.4.4 <u>Fire Protection and Emergency Response</u>

Portable multi-use fire extinguishers are placed throughout the facility, in accordance with the Uniform Fire Code (UFC). Fire suppression equipment, in accordance with

minimum requirements set by the Menlo Park Fire Protection District and the UFC are installed in the active covered process and storage areas. The facility also is equipped with automatic fire suppression systems, as required by the UFC. These systems are maintained every one to five years, as required. Containment systems that are subject to firewater discharge meet the containment requirements specified in the UFC. The drum storage and processing buildings (excluding West Drum Storage #1) are equipped with automatic foam sprinkler systems with manual override capability. West Drum Storage #1 and onsite office buildings have water sprinkler systems. In addition, the facility also has several fire hydrants, located near the active process and storage areas that can be easily accessed during an emergency. The water system is checked periodically to ensure it produces adequate water pressure and flow.

Romic has submitted its contingency plan to appropriate agencies (e.g., Menlo Park Fire Protection District, and the East Palo Alto Police Department), and arrangements are in place with these and other agencies regarding the type of response and nature of potential hazards at the facility.

#### 2.4.2.5 Facility Schedule and Personnel

The Romic facility is permitted to operate three shifts per day, 24 hours a day, 7 days a week, 365 days per year. The shifts begin at 7:00 a.m., 3:00 p.m. and 11:00 p.m. Onsite activities may occur 24 hours per day. Most waste is received between 8:00 a.m. and 3:30 p.m. weekdays.

Current permitted waste storage and treatment operations at Romic are supported by a full-time work force of approximately 118 people. The number of personnel at the facility and the number of shifts worked, vary according to the amount of waste being processed, but is less than 118 persons working in a maximum three shifts on any given day.

Romic has an ongoing training program for facility personnel, designed to assure that staff can respond effectively to job requirements and emergencies. Each employee is trained at least annually to be familiar with the use of emergency equipment and procedures specified in applicable emergency response plans. No changes are anticipated in training procedures, frequency or scope as part of the proposed project.

#### 2.4.2.6 Waste Deliveries

Truck deliveries of incoming waste typically occur on weekdays, although wastes may be received on weekends. Access is via Bay Road (Figure 2-1). No traffic signals, stacking lanes or other traffic control devices are present relative to site access, as general traffic use on the roadway is light. Bay Road dead-ends just beyond the Romic facility entrance. The nearest through street is Pulgas Avenue, approximately one-half mile west of Romic. There are no through streets east of the intersection of Bay Road and Pulgas.

# 2.4.2.7 <u>Contingency Plan</u>

In accordance with Cal. Code Regs., tit. 22, § 66264.51, § 66264.53(a) and § 66270.14(b)(7), Romic has a Contingency Plan, details of which are provided in the Part B Permit Application, Section –VII Contingency Plan dated August 1989 which has been updated in Section G – Contingency Plan dated November 2001. Objectives of the Contingency Plan are to minimize hazards to public health or the environment from fires, explosions or any unplanned release of hazardous wastes or hazardous waste constituents to air, soil or surface water. A Romic-designated emergency coordinator is responsible for coordinating emergency response procedures in the event of an emergency and is either at the facility or on call at all times. The following would require implementation of the Contingency Plan:

- Fire or explosion
- Onsite or offsite release of hazardous waste or hazardous waste constituents

#### Natural disaster

The Contingency Plan provides detailed instructions for emergency response procedures. They include: incident response, assessment and identification; agency notification; containment and control, and evacuation plans. The Contingency Plan provides details on emergency response drills. The Menlo Park Fire Protection District is invited to attend these drills.

The Contingency Plan also provides post-emergency procedures for returning the site to normal operations after an emergency. Procedures include storage and treatment of released materials, equipment decontamination and maintenance, reactivation of activities in the affected area, personnel debriefing and incident reports, which are provided to appropriate agencies.

The Contingency Plan is provided to public agencies and hospitals and private emergency response contractors. The Menlo Park Fire Protection District is the primary responder in the event of an emergency. Other medical and/or police response is requested as needed.

The Romic Contingency Plan has been provided to the following:

- Menlo Park Fire Protection District
- East Palo Alto Police Department
- Office of Emergency Services
- CUPA San Mateo County Environmental Health Services
- San Mateo County Emergency Services
- U.S. Coast Guard
- DTSC Berkeley Office
- Bay Area Air Quality Management District
- East Palo Alto Sanitary District
- Palo Alto Regional Water Quality Control Plant
- Stanford Hospital Emergency Department

- Fremont Urgent Care Clinic
- Foss Environmental Services
- Philip Services
- Decon Environmental

The Contingency Plan is subject to review and amendment, as necessary, whenever the plan fails in an emergency, or when there are changes/revisions to the following:

- Facility permit.
- Design, construction, operation, maintenance or other factors that materially increase the potential for fire, explosion or release of hazardous waste or hazardous waste constituents, or change the response necessary in an emergency.
- List of emergency coordinators.
- List of emergency equipment.

# 2.4.2.8 Recordkeeping and Reporting

All records of test results, hazardous waste analysis or other determinations performed for the purpose of identifying, treating, storing or disposing of hazardous waste are kept in the operating record until final facility closure. Manifests of onsite-generated hazardous waste signed by the initial transporter are kept at least three years, or until a signed copy is received from the receiving facility. The signed facility copy is kept at least five years. Original copies of waste profiles are filed at the Romic facility, and electronic versions are available to plant personnel. Required records may be kept in either paper or electronic format. Romic retains injury and associated accident records for five years following the calendar year that the records cover, as required by the Division of Labor Statistics and Research, Chapter 7, Subchapter 1 – Cal. Code Regs., tit. 8 §14300.33.

#### 2.4.3 Other Activities Not Part of the Project

There are activities conducted at the Romic facility that may not require a permit. These activities include:

- hazardous waste processes that are exempt from permitting requirements,
- hazardous material storage, and
- groundwater investigation and clean up activities authorized under a separate regulatory authority.

#### 2.4.3.1 Non-Regulated Hazardous Waste Processes

**10-Day Transfer:** Romic manifests some wastes for shipment to other licensed facilities. Wastes managed under 10-day transfer are maintained in their original containers, transferred from one vehicle to another, and are not otherwise managed. This activity is exempt from DTSC permitting requirements and authorized under H&SC §25123.3 and Cal. Code Regs., tit. 22 §66263.18.

Universal Waste Handling: Universal wastes, such as fluorescent light bulbs, thermostats, batteries and aerosol cans are accepted for handling on a bill of lading. This activity is exempt from federal and state permitting requirements under 40 CFR 270.1(c)(2)(viii) and Cal. Code Regs., tit. 22 §66270.1(c)(2)(E) respectively.

Household Hazardous Waste Collection Events: Romic currently receives household hazardous waste from collection events held at various locations throughout the San Francisco Bay area. Should the facility receive authorization pursuant to California Health and Safety Code, § 25218.3, household hazardous waste collection activities may be conducted as authorized by a permit by rule (PBR).

**Drum Crushing:** Crushing of drums that meet the definition of empty container as provided in Cal. Code Regs., tit. 22, §66261.7.

**Tanker Truck Wash:** Washout of bulk tanker or vacuum trucks that meet the definition of empty container.

# 2.4.3.2 **Product Storage**

Some tanks at the site are not subject to DTSC regulation because they do not handle hazardous waste. These tanks may store product (e.g., recovered solvent), raw materials (e.g., boiler feed water) or non-hazardous material (e.g., cooling tower water). These tanks are shown on Table 2-4 and in Figure 2-4. Romic may add, remove or replace tanks that do not handle regulated wastes without DTSC approval. However, such modifications will be in compliance with other requirements, such as local building and fire codes and other hazardous material requirements.

#### 2.4.3.3 Groundwater Remediation

Groundwater remediation has been conducted at the Romic facility since 1993. This involves the onsite treatment of contaminated shallow groundwater. Treatment is conducted under an EPA-administered RCRA Section 3008(h) Consent Order (No. 09880015). In addition, technical assistance is provided by the Regional Water Quality Control Board – San Francisco Bay Region (RWQCB). This process is independent of the proposed project but is included because it occurs at the Romic facility, and will continue under the proposed project.

Under the EPA RCRA consent order, more than 3.5 million gallons of groundwater have been extracted and treated since remediation began in 1993. Additional final remediation of these waters is being evaluated and may involve continued extraction and treatment of groundwater beneath the facility or in-situ bioremediation. A

discussion of Romic's groundwater remediation program is also provided in Chapter 3.4 – Hydrology and Water Quality.

A pilot study was conducted at the Romic facility to test an enhanced bioremediation technique using both cheese whey and molasses. The results of this study showed the use of this biotreatment is more effective than the current extraction and treatment system being used at Romic. On February 23, 2004, the USEPA allowed temporary shutdown of the extraction and treatment system and expansion of the in-situ biological treatment test system as the sole method of treating groundwater contamination at the facility. Replacement with the in-situ biological treatment system is conditional on monitoring for possible rebound of volatile organic compound concentrations at selected locations through December 2004.

# 2.4.3.4 Other Services

The following support the handling and treatment of hazardous wastes at the Romic facility:

**Laboratory Services:** Romic operates a laboratory that conducts extensive analyses to classify incoming wastes for proper treatment. The laboratory assists in the fingerprinting of waste shipments to determine conformity with approved profiles and to ensure compatibility with wastes stored onsite. The laboratory operates 24 hours a day, seven days a week.

**Transportation:** Romic is a licensed hazardous waste transporter that can bring chemical wastes to the facility and deliver recycled solvents to customers.

**Technical Assistance:** Romic helps customers reduce and better manage their wastes through a program of education and training. Romic also has programs in place to train employees to prepare for emergencies and to document, label, package and ship wastes according to federal and state regulatory requirements.

**Onsite Services:** Various services are offered by Romic to better manage wastes and to assist customers in maintaining safe and environmentally sound waste management practices. These include tank cleaning services and provision of portable recycling units at customer locations.

#### 2.5 PROPOSED FACILITY OPERATIONS

The proposed facility operations include all the existing facility activities discussed in section 2.4.2, and proposed upgrades, expansions and modifications to hazardous waste treatment and storage described below.

# 2.5.1 <u>Tanks, Process Vessels/Units And Other Areas Previously</u> Authorized By DTSC

Existing and some not yet constructed tanks, process vessels and process equipment/waste management units were authorized by DTSC in the 1986 state Permit, 1990 state Permit Modification, and the 1992 federal Permit. These infrastructure items are part of the baseline and have already been through the CEQA process and have been approved. The previously authorized items are shown in Table 2-3, which lists tanks, and Table 2-6, which lists process units. The items are also shown on Figure 2-4. Processes and activities associated with use of these infrastructure items are part of the proposed project and are discussed in the following sections 2.5.2 – 2.5.7.

# 2.5.2 <u>Tanks, Process Vessels, And Process Equipment/Waste</u> Management Units That Make Up The Project

In its Part B Application, Romic is proposing to:

1) Reauthorize the permit for waste management units that are currently existing and waste management units that were never

constructed (authorized in the 1990 permit modification/1992 permit). See Tables 2-3 and 2-6.

- 2) Request to permit currently existing process equipment as hazardous waste management units and permit new hazardous waste management units. See Tables 2-5 and 2-7.
- 3) Drop from authorization some units that were authorized but never built. They are not being proposed on the current Part B Permit Application. See Table 2-6.

The Project includes all of the items included in Tables 2-3, 2-5, 2-6 and 2-7 and also the ten previously authorized units that now will not be constructed. The tanks will be used for treatment of organic liquids and wastewater and for fuel blending. The Inorganic Treatment System will be used for treatment of wastewater and will have the ability to remove metals. Planned, permitted tanks R96 and R97 will replace two existing non-regulated, 11,750-gal tanks and tank 105 will replace an existing 126,904-gal. non-regulated tank. Removal of the non-regulated tanks will require 3-4 people approximately five working days. The two 11,750-gal tanks and the 126,904-gal tank are empty and will be hydroblasted. The three metal tanks will be scrapped.

Waste types included as part of the proposed project are listed in Tables 2-1A and 2-2A according to Federal (EPA) and State of California (DTSC) waste codes, respectively. Note that corresponding listings of waste types associated with currently permitted operations (Baseline) are provided in Tables 2-1 and 2-2 for Federal and State waste codes.

# 2.5.3 Improvements To The Existing Facility

The proposed project also includes improvements that will be made to existing waste management units. These include treating onsite secondary containment systems with concrete sealer to protect the concrete from liquid acids, salts and other contaminants, increasing the capacity of some of the secondary containment systems, and upgrading anchors and foundations of tanks and process units to better withstand seismic events.

The floor of West Drum Storage Building 1 (Figure 2-3) will be coated with an acidresistant epoxy coating. The other facility containment systems will be coated with a reactive silicate concrete treatment. The product will be applied to clean, dry concrete, where it will permeate the permeable zones of the concrete to harden, strengthen and reduce the porosity of the concrete, also filling shrinkage and alligator cracks. The coating will protect the concrete from liquid acids, salts and other contaminants.

Based on a seismic risk analysis (Plecnik, 2003), seismic upgrades are to be made to many of the facility's stainless steel tanks, some of the other tanks, reboilers and other equipment. Upgrades to foundations and anchorages also will be accomplished. One of the upgrades (Category D, high seismic risk level) involves closure and removal of ten existing cone-bottom tanks and replacement with nine flat-bottom tanks. Romic ceased using these ten tanks on July 1, 2004. They will begin closure on the ten conebottom tanks under their existing permit. Replacement with flat-bottom tanks may proceed after DTSC completes its review of the Part B permit renewal application. Romic has already completed seismic strengthening of two tanks and their associated mezzanine (Category D, high seismic risk level). This work was performed under a prior modification of the existing permit. Because these upgrades are necessary for safety reasons, they are exempt from CEQA analysis.

These upgrades will bring the facility into conformance with the seismic provisions in the 1997 Uniform Building Code and the International Building Code 2000. A summary of

the improvements to existing facilities and the anticipated time for completion are shown on Table 2-8.

As part of the project, two areas with "enhanced" secondary containment will be constructed and used for activities such as temporary parking of loaded tanker trucks. The areas will be located at the truck parking area east of the vehicle maintenance building (Figure 2-3 or Figure 2-4). Secondary containment at the facility will be improved and these improvements are part of the proposed project.

# 2.5.4 **Proposed New Waste Management Units**

As part of the proposed project, some new waste management units will be constructed. These are briefly described below. They are described in detail in Romic's Hazardous Waste Facility Part B Permit Application, Section D – Process Equipment, and Section E – Process Operations, dated April 2005.

A new drum pumping area will be constructed adjacent to the west side of the sampling area (Figure 2-4). This area will be used for the temporary staging of drums (maximum 24 hours), which then will be pumped into a yard tanker for subsequent transfer to an authorized process unit or storage tank. The drum pumping area will be an uncovered area on an existing reinforced concrete slab, with a maximum capacity of eighty 55-gallon drums or equivalent (4,400 gallons). The area will be surrounded by a 12-inch berm that will provide secondary containment sufficient to handle 10 percent of the maximum capacity plus precipitation from a 25-year, 24-hour storm event. The drum pumping area will be used to handle any of the containerized waste streams processed onsite.

A new Inorganic Treatment System will be constructed both inside the current building adjacent to the Sampling Area Storage Building and outside next to the Liquefaction Unit. Tank Farm F will include a filter press, a roll off container, and Tanks A-2, A-3, A-4 and A-5. Tanks 106, 107, 108, and 109 in Tank Farm T will be mainly acidic waste

storage. Tank Farm S will store only the alkaline waste streams. This system will include the capabilities to precipitate and remove metals and to handle higher concentrations of acidic and alkaline components.

Tank Farm E will be constructed adjacent to the Liquefaction Unit Building. This new tank farm will contain tanks that were authorized in the 1992 permit but were never built. Tank R-90, A-6, A-7, N, and O will be storage and fuel blending tanks.

Tanks 81, 86, 88, 87, and 89 will be installed in Tank Farm Q which currently exists. These new tanks are also storage tanks for organic and aqueous waste and fuel blending.

An enhanced secondary containment area for staging unmonitored trucks will be sited where the current truck parking area is located. It will provide containment pursuant to Health and Safety Code § 25200.19 for hazardous waste being held in tanker trucks awaiting loading and unloading operations. This area also serves as the hazardous waste storage area for trucks prior to management in the Truck Wash Unit.

The Debris Shredder (in Liquefaction Building), the High Temperature Unit (near Tank Farm B), the Truck Wash (south of Tank Farm K), a Drum Crusher unit (in North Storage Building), an ion exchange tank, two carbon absorption tanks, and the UV/OX System (adjacent to Tank Farm K) are all existing equipment that are being added to the permit application. New equipment will also be added to the Facility. Both a portable drum crusher, and a portable aerosol depressurization unit will be operated in the authorized container storage buildings.

# 2.5.5 <u>Planned New Processes</u>

Romic will add new processes to those it now performs. These will provide additional treatment opportunities and increase facility safety and efficiency. The new processes

are summarized below, and described in detail in Romic's Part B Permit Application, Section E – Process Operations, dated April 2005.

Inorganic Waste Treatment: Treatment of inorganic wastes using methods that include neutralization/pH adjustment, chemical precipitation, oxidation/reduction, de-watering, filtration and stabilization. The process includes the ability to precipitate and remove metals.

**Solids Consolidation:** Sorting and consolidating containers of solid hazardous waste to remove incompatible materials, incidental liquids, and certain types of solid debris (e.g., large pieces of metal) that are unacceptable to downstream off-site waste treatment facilities resulting in a bulk waste stream amenable to offsite transfer and recycling.

**Debris Shredding:** Processing contaminated solid materials through an industrial shredder to facilitate consolidation, transportation, and recycling.

**Aerosol Depressurization:** Puncturing of commercial aerosol containers to remove flammable propellant and contents. Propellant is processed to an air emission control unit. The hazardous material is collected and transferred to the fuel blending operation.

**Drum Crushing:** In addition to existing cleaning and crushing of "California-empty" drums as provided in Cal. Code Regs., tit. 22 §66261.7. Some drums that will be crushed may contain residual amounts of waste material and, therefore, do not meet the definition of a California-empty container. These drums can carry almost any of the non-RCRA waste codes received at the facility.

**Tanker Truck Wash:** Washout of bulk tanker or vacuum trucks to meet the definition of empty container. Rinse water is transferred

to storage tanks and evaluated for processing through the onsite wastewater treatment system.

# 2.5.6 Changes In Facility Capacities

There will be changes in permitted container and tank storage and treatment units. Existing and proposed storage and treatment units are shown in Table 2-9. While storage capacity and the number of specific treatment units will change, the overall facility liquid treatment capacity will remain at the currently permitted limit of 154,512 gallons per day, annual average. The capacities of each of the container storage locations will change as shown in Table 2-10. The full capacity of each container storage unit cannot currently be met, however, as the existing permit includes a maximum of 2,531 drums of hazardous waste stored at the facility (139,205 gallons). The new permit being applied for will provide for maximum of 317,355 gallons of hazardous waste, stored in containers (drums, cans, etc.). The proposed project also includes 320 cubic yards of capacity (versus an existing 68 cubic yards) for storing solid hazardous waste in eight roll-off containers to be located outside in four designated areas. The Roll-off Bins will store only solid waste and do not require secondary containment.

The storage area capacity is as follows:

Area	Dimensions	Storage Capacity		
Aica	Difficitions	Containers	Gallons	
North Storage	50' x 100'	830 drums or 105 Totes	45,650 gallons	
South Storage	78' x 170'	2,556 drums or 321 totes	140,580 gallons	
Sampling Area	74' x 124'	741 drums or 116 totes	40,755 gallons	
West #1	30' x 60'	336 drums or 36 portable tanks	18,480 gallons	

West #2	65' x 125'	1198 drums or 90 totes	65,890 gallons
Drum Pump Area	irregular	One (1) truck	6,000 gallons
Roll-off Bin Areas	5 locations	8 Roll-off bins	320 cubic yards
TOTAL		5661 drums and	317,355 gallons and
TOTAL		8 roll-off bins	320 cubic yards

### 2.5.7 <u>Construction Activities</u>

Construction of new tanks and process vessels/units, improvements to existing process equipment and/or waste management units, proposed new process equipment and/or waste management units, and new processes, will be performed primarily by outside contractors. In general, construction activities will include excavation, pouring of concrete, welding, and other construction processes.

### 2.6 HEALTH RISK ASSESSMENT

The HRA addressed both the current exposure scenario and the exposure scenario for the proposed project. The above conclusions are for the proposed project.

Environ Corporation (Reference 1) performed a human health risk assessment (HHRA) for both the current and future facilities. The HHRA analyzed air emissions and their effect on workers at the facility, residents living near the facility and recreational visitors. The estimated lifetime incremental cancer risk for all these populations was found to be less than one in one hundred thousand (1 x 10<sup>-5</sup>). This increased risk is less than the risk level used for Proposition 65 and well within the acceptable risk level used by the USEPA for hazardous waste sites. The hazard index for non-cancer health hazards was found to be less than one for all populations evaluated. According to the USEPA, chemical exposures that result in hazard indexes less than one are not expected to result in adverse non-cancer health effects.

An ecological risk assessment was also performed. The results indicate that the chemicals detected in slough sediment do not pose an unacceptable risk to local receptors.

### 2.7 CLOSURE PLAN

For purposes of the Closure Plan, Romic will operate for another 25 years and may operate past this date as economic and regulatory factors allow. If the closure date is extended, the Closure Plan will be amended, as necessary. The Closure Plan will be amended if any of the following occur:

- Changes in operating plans or facility design affecting the Closure Plan (such as construction of new units).
- Change in anticipated year of closure.
- Unexpected events arising during partial or final closure that affect the Closure Plan.
- Changes in regulations that affect facility closure.
- Requests by DTSC.

A detailed Closure Plan for the Romic facility is provided in the Part B Permit Application, Appendix 3 – Closure Plan, dated April 2005. As described in the plan, closure will be performed in accordance with Cal. Code Regs., tit. 22, division 4.5, chap. 14, Article 7, and will meet federal and State closure performance standards. The closure activities will:

- Minimize the need for further maintenance.
- Control, minimize or eliminate post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products.

 Ensure that any equipment, structures or buildings left onsite contain no hazardous waste or hazardous waste constituents.

In general, these standards will be met by:

- Removing or processing all regulated waste present at the facility at the time of closure, and
- Decontamination of contaminated equipment, containment system components, structures and soils to meet specified closure performance standards, or
- Removing from the site contaminated equipment,
  containment system components, structures, soils and
  equipment. These waste materials will be properly
  characterized to determine if they are hazardous wastes in
  accordance with Cal. Code Regs., tit. 22 §66261.3(e) and
  §66262.11 and will be sent to a licensed disposal, treatment
  or recycling facility.

During closure, Romic will treat hazardous wastes onsite in appropriately authorized waste management units. This includes remaining offsite waste and wastes generated during closure. Closure-generated wastes will include water from decontamination and disposal of consumables. Wastes that are not permitted to be treated onsite will be sent offsite to a licensed treatment, storage and/or disposal facility. Mobile or fixed equipment used to process or handle hazardous wastes will be cleaned, decontaminated and re-used, salvaged or, if necessary, disposed offsite at an appropriately-permitted facility.

An independent registered professional engineer will monitor all closure activities to ensure they are conducted in accordance with the approved Closure Plan. These activities include storage and treatment system decontamination, secondary containment decontamination, and soil sampling and analysis.

Romic will notify DTSC in writing at least 45 days prior to the date final closure is expected to begin, and at least seven days prior to any closure performance sampling. Due to the variety and quantity of wastes and size of the closure areas, closure is expected to take longer than 180 days and Romic will likely require an extension of the 180-day closure time allowance. Within 60 days of completion of final closure, Romic will submit to DTSC certification that the final closure of the facility has been conducted in accordance with the specifications of the approved Closure Plan. A copy of the approved Closure Plan and subsequent authorized amendments will be maintained at the facility until closure is complete and certified.

Post-closure requirements are not anticipated. However, they could be required if either of the following occurs:

- Groundwater contamination due to a release from regulated units is confirmed at the time of closure.
- Romic departs from the "clean closure" scenario.

Romic has included provisions for "partial closure" in its Closure Plan. Partial closure would be implemented if, during the life of the permit, it became necessary for Romic to replace or conduct major repairs on waste handling equipment or units. Romic could also choose to deactivate a permitted hazardous waste management unit or process, in which case partial closure may be required.

Romic will demonstrate continuous compliance with Cal. Code Regs., tit. 22, § 66264.143 by providing documentation of financial assurance in at least the amount of the closure cost estimate provided in the Part B Permit Application, Appendix 3 – Closure Plan dated April 2005. The financial assurance mechanism will be adjusted at least 60 days prior to the operation of any planned units and, as necessary, to satisfy closure requirements as outlined in the Part B Permit Application.

### 2.8 VIOLATION HISTORY

Romic is subject to inspection/audit by a number of regulatory bodies including DTSC, Bay Area Air Quality Management District (BAAQMD), California Occupational Safety and Health Agency (CA OSHA), San Francisco Regional Water Quality Control Board (SFRWQCB), United States Department of Transportation (USDOT), and the United States Environmental Protection Agency (USEPA). Violations of agency regulations have occurred occasionally and corrective actions have been implemented to return to compliance with the regulations. Table 2-11 shows violations that have been alleged from 1999 to the present and corrective actions that have been taken to return to compliance.

### **REFERENCES**

- 1. Human Health Risk Assessment and Ecological Risk Assessment for Romic's East Palo Alto Facility, by Environ Corporation, February 19, 2001.
- Addendum, Human Health Risk Assessment and Ecological Risk Assessment for Romic's East Palo Alto Facility. Prepared by Environ Corporation, September 23, 2003.
- City/County Association of Governments of San Mateo County (C/CAG-SMC). San Mateo County Countywide Transportation Plan. June 1999.
- City of East Palo Alto. City of East Palo Alto General Plan, June 1998.
   Adopted December 1999.
- 5. Romic Part B Permit Application, East Palo Alto, California TSD Facility, Volumes 1, 2, & 3, CAD 009 452 657, April 2005.
- 6. San Mateo County Hazardous Waste Management Plan, January 1992.
- 7. General Plan, Final Program Environmental Impact Report, City of East Palo Alto, Cotton/Beland/Associates, November 23, 1999.
- Amendments to the East Palo Alto General Plan and Zoning Ordinance and Infrastructure Improvements in the Ravenswood Business District, Draft Environmental Impact Report, State Clearinghouse No. 2003012113, by ESA, June 18, 2003.
- Plecnik, Joseph M., Ph.D, P.E., Summary of Seismic Risk Analysis of 111
   Tanks and Ten Columns at the Romic Facility in East Palo Alto, CA.
   Report Number 03-11-22, November 26, 2003.

TABLE 2-1 CURRENT EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS (BASELINE)

			PRO	CESS S	SYSTE	M HAN	DLIN	G WAS	TE	
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Small Container Management	Off-Site Transfer/Storage	Generated Onsite
D001	Ignitable (I)	X	X	X	X	X		X	X	X
D002	Corrosive (C)	X		X	X	X	X	X	X	
D004	Arsenic	X		X	X	X	X	X	X	X
D005	Barium	X		X	X	X	X	X	X	X
D006	Cadmium	X		X	X	X	X	X	X	X
D007	Chromium	X		X	X	X	X	X	X	X
D008	Lead	X	X	X	X	X	X	X	X	X
D009	Mercury	X		X	X	X	X	X	X	X
D010	Selenium	X		X	X	X	X	X	X	X
D011	Silver	X		X	X	X	X	X	X	X
F001	Spent halogenated solvents used in degreasing (see list in 22 CCR 66261.31)	X		X	X	X		X	X	
F002	Spent halogenated solvents (see list in 22 CCR 66261.31)	X		X	X	X		X	X	
F003	Spent non-halogenated solvents (see list in 22 CCR 66261.31) that are ignitable but not toxic	X		X	X	X		X	X	
F004	Spent non-halogenated solvents (see list in 22 CCR 66261.31)	X		X	X	X		X	X	
F005	Spent non-halogenated solvents (see list in 22 CCR 66261.31) that are ignitable and toxic	X		X	X	X		X	X	
F006	Wastewater treatment sludges from electroplating operations								X	
F024	Process wastes, including but not limited to distillation, residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes.								X	
K048	dissolved air flotation (DAF) float from the petroleum refining industry	X		X	X	X			X	
K049	slop oil emulsion solids from the petroleum refining industry	X		X	X				X	
K050	heat exchanger bundle cleaning sludge from the petroleum refining industry	X		X	X				X	
K051	API separator sludge from the petroleum refining industry	X		X	X	X			X	
K052	tank bottoms (leaded) from the petroleum refining industry	X		X	X	X			X	

TABLE 2-1 CURRENT EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS (BASELINE)

			PRO	CESS S	SYSTE	M HAN	NDLIN(	G WAS	TE	
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Small Container Management	Off-Site Transfer/Storage	Generated Onsite
	solvent washes and sludges, caustic washes and sludges, or water washes and sludges									
K086	from cleaning tubs and equipment used in the formulation of ink from pigments,	X		X	X	X	X		X	
	driers, soaps, and stabilizers containing chromium and lead;									
K087	decanter tank tar sludge from coking operations.			X	X	X			X	
U002	2-Propanone (I) (OR) Acetone (I)	X		X	X	X		X	X	X
U003	Acetonitrile (I,T)	X		X	X			X	X	X
U004	Acetophenone (OR) Ethanone, 1-phenyl-			X				X	X	
	Benzene (I,T)	X		X	X	X		X	X	X
	1-Butanol (I) (OR) n-Butyl alcohol (I)	X		X	X	X		X	X	X
	Benzene, chloro- (OR) Chlorobenzene	X		X	X			X	X	X
	Benzene, (1-methylethyl)- (I) (OR) Cumene (I)			X	X			X	X	
	Benzene, hexahydro- (I) (OR) Cyclohexane (I)	X		X	X			X	X	X
U057	Cyclohexanone (I)	X		X	X			X	X	X
U070	Benzene, 1,2-dichloro- (OR) o-Dichlorobenzene	X		X	X			X	X	X
U080	Methane, dichloro- (OR) Methylene chloride	X		X	X			X	X	X
U108	1,4-Diethyleneoxide (OR) 1,4-Dioxane			X	X			X	X	X
	1-Propanimine, N-propyl-(I) (OR) Dipropylamine (I)							X	X	
U112	Acetic acid ethyl ester (I) (OR) Ethyl acetate (I)	X		X	X			X	X	
	Methane, trichlorofluoro- (OR) Trichloromonofluoromethane	X		X	X			X	X	X
	Formaldehyde			X				X	X	
	1-Propanol, 2-methyl- (I,T) (OR) Isobutyl alcohol (I,T)	X		X	X			X	X	X
	Methanol (I) (OR) Methyl alcohol (I)	X		X	X	X		X	X	X
U159	2-Butanone (I,T) (OR) Methyl ethyl ketone (MEK) (I,T)	X		X	X	X		X	X	X
U161	4-Methyl-2-pentanone (I) (OR) Methyl isobutyl ketone (I) (OR) Pentanol, 4-methyl-	X		X	X	X		X	X	X
U171	2-Nitropropane (I,T) (OR) Propane, 2-nitro- (I,T)			X	X			X	X	
	1,1,2,2-Tetrachloroethane (OR) Ethane, 1,1,2,2-tetrachloro-	X		X				X	X	X
U210	Ethene, tetrachloro- (OR) Tetrachloroethylene	X		X	X	X		X	X	X

TABLE 2-1 CURRENT EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS (BASELINE)

			PRO	CESS S	SYSTE	M HAN	NDLING	G WAS	TE	
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Small Container Management	Off-Site Transfer/Storage	Generated Onsite
U211	Carbon tetrachloride (OR) Methane, tetrachloro-			X	X			X	X	
U213	Furan, tetrahydro-(I) (OR) Tetrahydrofuran (I)	X		X	X	X		X	X	X
U220	Benzene, methyl- (OR) Toluene	X		X	X	X		X	X	X
U226	Ethane, 1,1,1-trichloro- (OR) Methyl chloroform	X		X	X	X		X	X	X
U228	Ethene, trichloro- (OR) Trichloroethylene	X		X	X	X		X	X	X
U239	Benzene, dimethyl- (I,T) (OR) Xylene (I)	X		X	X	X		X	X	X

#### **Notes:**

- $1.) \ Unless \ otherwise \ indicated, \ all \ "D", "F", "K", "P", \ and \ "U" \ listed \ wastes \ shown \ above \ are \ hazardous \ due \ to \ toxic \ properties.$ 
  - If not hazardous due to toxicity only, the hazardous properties are indicated in parentheses following the waste description using the notations listed below:
    - (T) = Toxicity, (R) = Reactivity, (I) = Ignitability, (C) = Corrosivity, (H) = Acute Hazardous Waste (refer to 22 CCR 66261.30 for additional information on each waste stream
- 2.) The waste description following "(OR)" in the "Waste Type" column signifies the common name of the material, per 40 CFR 261.30
- 3). Refer to 22 CCR 66261.20 to 66261.33 for full description of the waste codes.
- 4). Organic wastes containing less than 500 ppmw of volatile organic compounds may be stabilized to remove free liquids in the roll-off bin located in this process area. These organic wastes may carry any codes associated with waste destined for solids consolidation.

TABLE 2-2 CURRENT CALIFORNIA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS (BASELINE)

			PRO	CESS	SYSTE	EM HAI	NDLIN	NG WAST	Œ	
WASTE CODE	WASTE TYPE	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Aqueous Treatment	Neutralization	Small Container Management	Off-Site Transfer	Generated Onsite
131	Aqueous solution ( $2 \le pH \le 12.5$ ) containing reactive anions (azide, bromate, chlorate, cyanide, fluoride, hypochlorite, nitrite, perchlorate, and sulfide anions)					X		X	X	
132	Aqueous solution with metals (< restricted levels and see waste code 121 for a list of metals)		X			X		X	X	
133	Aqueous solution with 10% or more total organic residues		X	X	X	X		X	X	
134	Aqueous solution with less than 10% total organic residues		X	X	X	X		X	X	
135	Unspecified aqueous solution		X	X	X	X		X	X	X
141	Off-specification, aged, or surplus inorganics					X	X	X	X	X
171	Metal sludge (see 121)							X	X	
172	Metal dust (see 121) and machining waste							X	X	
181	Other inorganic solid waste			X				X	X	X
211	(2) Organics: Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)	X		X	X	X		X	X	X
212	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)	X		X	X	X		X	X	X
213	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)	X		X	X			X	X	X
214	Unspecified solvent mixture	X		X	X	X		X	X	X
221	Waste oil and mixed oil			X	X	X		X	X	X
222	Oil/water separation sludge			X	X	X		X	X	
223	Unspecified oil-containing waste			X	X	X		X	X	X
241	Tank bottom waste			X	X			X	X	
251	Still bottoms with halogenated organics	X		X	X			X	X	
252	Other still bottom waste	X		X	X			X	X	
271	Organic monomer waste (includes unreacted resins)			X	X			X	X	
272	Polymeric resin waste			X	X			X	X	
281	Adhesives			X	X	X		X	X	X
291	Latex waste			X	X	X		X	X	X
331	Off-specification, aged, or surplus organics	X		X	X	X		X	X	X
341	Organic liquids (nonsolvents) with halogens			X	X	X		X	X	
342	Organic liquids with metals (see 121)	X		X	X	X		X	X	X
343	Unspecified organic liquid mixture	X	X	X	X	X		X	X	X
351	Organic solids with halogens			X	X			X	X	X

X

X

solvent Recovery

X

X

X

Ethylene Glycol Recycling

Fuel Blending

X

X

X

Χ

Χ

X

X

Liquefaction

X

X

X

Χ

Χ

X

Χ

X

X

X

X

Χ

X

X

PROCESS SYSTEM HANDLING WASTE

Aqueous Treatment Generated Onsite

X

X

X

X

X

Χ

X

X

Off-Site Transfer

Χ

Χ

X

Χ

Χ

Χ

X

X

Χ

Χ

Χ

Χ

Χ

X

Χ

Χ

X X

X

Small Container

X

X

X X

X

X

X

X

X

Χ

X

X

Χ

X

X

**Neutralization** 

Х

X

WASTE CODE

411

421

431

451

461

471

481

521

541

551

561

571

591

612

WASTE TYPE
Other organic solids

Lime sludge

Sulfur sludge

Paint sludge

Drilling mud

Detergent and soap

Baghouse waste

Household waste

Phosphate sludge

Degreasing sludge

Paper sludge/pulp

Tetraethyl lead sludge

Unspecified sludge waste

Laboratory waste chemicals

Other empty containers 30 gallons or more

Empty containers less than 30 gallons

Photochemicals/photoprocessing waste

Fly ash, bottom ash, and retort ash

Liquids with nickel > 134 mg/l

Alum and gypsum sludge

120	Elquids with meker = 15 i mg/i	21		21	21	21		21	21	
728	Liquids with thallium ≥ 130 mg/l	X		X	X	X		X	X	
741	Liquids with halogenated organic compounds ≥ 1000 mg/l	X		X	X	X		X	X	
/ >	Solids or sludges with halogenated organic compounds $\geq 1000$ mg/kg	X		X	X			X	X	
	wastes are hazardous by definition under 22 CCR 66261 (incl. articles 3-4, and Appendic EPA waste codes (see Table C-1)	x XII). S	Some of	the wa	istes lis	sted abo	ove m	ay also ca	ırry	

<sup>2).</sup> Organic wastes containing less than 500 ppmw of volatile organic compounds may be stabilized to remove free liquids in the roll-off bin located in this process These organic wastes may carry any codes associated with waste destined for solids consolidation.

TABLE 2-1A
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						PRO	CESS S	SYSTE	M HAN	DLING	G WAS	TE				
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite
D001	Ignitable (I)	X	X	X	X	X			X	X	X	X		X	X	X
D002	Corrosive (C)			X	X		X	X	X		X			X	X	X
D003	Reactive (R)					Will	not be		at Faci	ility					X	
D004	Arsenic	X		X	X	X	X	X	X	X	X			X	X	X
D005	Barium	X		X	X	X	X	X	X	X	X			X	X	X
D006	Cadmium	X		X	X	X	X	X	X	X	X			X	X	X
D007	Chromium	X		X	X	X	X	X	X	X	X			X	X	X
D008	Lead	X	X	X	X	X	X	X	X	X	X			X	X	X
D009	Mercury	X		X	X	X	X	X	X	X	X			X	X	X
	Selenium	X		X	X	X	X	X	X	X	X			X	X	X
D011	Silver	X		X	X	X	X	X	X	X	X			X	X	X
D012	Endrin				X				X		X			X	X	
D013	Lindane				X				X		X			X	X	
D014	Methoxychlor				X				X		X			X	X	
D015	Toxaphene				X				X		X			X	X	
D016	2,4-D								X		X			X	X	
D017	2,4,5-TP (Silvex)								X		X			X	X	
D018	Benzene	X		X	X	X	X	X	X	X	X			X	X	
D019	Carbon Tetrachloride	X		X	X	X			X	X	X			X	X	
D020	Chlordane	X			X	X			X	X	X			X	X	
D021	Chlorobenzene	X		X	X	X			X	X	X			X	X	
D022	Chloroform	X		X	X	X			X	X	X			X	X	
D023	o- Cresol	X		X	X	X			X	X	X			X	X	
D024	m- Cresol	X		X	X	X			X	X	X			X	X	
D025	p- Cresol	X		X	X	X			X	X	X			X	X	
D026	Cresol	X		X	X	X			X	X	X			X	X	
D027	1, 4- Dichlorobenzene	X		X	X	X			X	X	X			X	X	
D028	1, 2- Dichloroethane	X		X	X	X			X	X	X			X	X	

TABLE 2-1A
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						PRO	CESS S	SYSTE	M HAN	DLING	G WAS	TE				$\neg$
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite
D029	1, 1- Dichlorethylene			X	X	X			X		X			X	X	
D030	2, 4- Dinitrotoluene			X	X				X		X			X	X	
D031	Heptachlor (and its epoxide)				X				X		X			X	X	
D032	Hexachlorobenzene	X		X	X	X			X	X	X			X	X	
D033	Hexachlorobutadiene	X		X	X	X			X	X	X			X	X	
D034	Hexachloroethane	X		X	X	X			X	X	X			X	X	
D035	Methyl Ethyl Ketone	X		X	X	X			X	X	X			X	X	X
D036	Nitrobenzene	X		X	X	X			X	X	X			X	X	
D037	Pentachlorophenol								X		X			X	X	
D038	Pyridine	X		X	X	X			X	X	X			X	X	
D039	Tetrachloroethylene	X		X	X	X			X	X	X			X	X	X
D040	Trichloroethylene	X		X	X	X			X	X	X			X	X	X
D041	2,4,5-Trichlorophenol	X		X	X	X			X	X	X			X	X	
D042	2,4,6-Trichlorophenol	X		X	X	X			X	X	X			X	X	
D043	Vinyl Chloride	X			X	X			X	X	X			X	X	
F001	Spent halogenated solvents used in degreasing (see list in 22 CCR 66261.31)	X		X	X	X			X	X	X			X	X	
F002	Spent halogenated solvents (see list in 22 CCR 66261.31)	X		X	X	X			X	X	X			X	X	
F003	Spent non-halogenated solvents (see list in 22 CCR 66261.31) that are ignitable but not toxic	X		X	X	X			X	X	X			X	X	
F004	Spent non-halogenated solvents (see list in 22 CCR 66261.31)	X		X	X	X			X	X	X			X	X	
F005	Spent non-halogenated solvents (see list in 22 CCR 66261.31) that are ignitable and toxic	X		X	X	X			X	X	X			X	X	
F006	Wastewater treatment sludges from electroplating operations							X	X					X	X	
F007	spent cyanide plating bath solutions from electroplating operations (R,T)						X	X	X					X	X	
F008	plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process (R,T)						X	X	X					X	X	
F009	spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (R,T)						X	X	X					X	X	

TABLE 2-1A
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						PRO	CESS S	SYSTE	M HAN	NDLING	G WAS	TE				
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process						X	X	X					X	X	
F024	Process wastes, including but not limited to distillation, residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes.								X					X	X	
F027	discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols (H)										X			X	X	
F037	Petroleum refinery primary oil/water/solids separation sludge			X	X	X		X	X	X				X	X	
F038	oil/water/solids separation sludge - any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries.			X	X	X		X	X	X				X	X	
F039	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted hazardous waste classified as hazardous under article 4 of this chapter.					X		X	X	X				X	X	
K048	dissolved air flotation (DAF) float from the petroleum refining industry	X		X	X	X		X	X	X				X	X	
K049	slop oil emulsion solids from the petroleum refining industry	X		X	X	X			X	X				X	X	
K050	heat exchanger bundle cleaning sludge from the petroleum refining industry	X		X	X	X		X	X	X				X	X	
K051	API separator sludge from the petroleum refining industry	X		X	X	X		X	X	X				X	X	
K052	tank bottoms (leaded) from the petroleum refining industry	X		X	X	X		X	X	X				X	X	
K086	solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead;	X		X	X	X	X	X	X					X	X	
K087	decanter tank tar sludge from coking operations.			X	X	X								X	X	
K156	Organic hazardous waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to hazardous wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)				X				X					X	X	

TABLE 2-1A
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						PRO	CESS S	SYSTE	M HAN	DLING	G WAS	TE				
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite
K157	Hazardous wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes													X	X	
K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes.							X	X					X	X	
K159	Organics from the treatment of thiocarbamate hazardous wastes.			X										X	X	
	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiorcarbamate acids and their salts.								X					X	X	
K169	Crude oil storage tank sediment from petroleum refining operations			X	X				X					X	X	
K170	Clarified slurry oil storage tank sediment and/or in-line filter/separation solids from petroleum refining operations			X	X				X					X	X	
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media) (I,T)				X				X					X	X	
K172	Spent hydro refining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media) (I,T)				X				X					X	X	
P004	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha, 4alpha, 4abeta, 5alpha, 8alpha, 8abeta)- (OR) Aldrin (H)										X			X	X	
P005	2-Propen-1-ol (OR) Allyl alcohol (H)	X		X		X			X		X			X	X	
P008	4-Aminopyridine (OR) 4-Pyridinamine (H)										X			X	X	
P010	Arsenic acid H3AsO4 (H)							X			X			X	X	
P011	Arsenic oxide As2O5 (OR) Arsenic pentoxide (H)							X			X			X	X	
P012	Arsenic oxide As2O3 (OR) Arsenic trioxide (H)							X			X			X	X	
	Benzenethiol (OR) Thiophenol (H)										X			X	X	
	Beryllium (H)										X			X	X	igsqcut
	Dichloromethyl ether (OR) Methane, oxybis <chloro- (h)<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>X</td><td></td><td></td><td>X</td><td>X</td><td>igsquare</td></chloro->										X			X	X	igsquare
P018	Brucine (OR) Strychnidin-10-one, 2,3-dimethoxy- (H)										X			X	X	

TABLE 2-1A
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						DDO	CECC	CVCTE	миах	DLING	TWAS	TE				—
				1		rku	CESS N	3131L	IVI IIAI	אוואמי	J WAS	1 E				$\overline{}$
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite
	Carbon disulfide (H)										X			X	X	
P024	Benzenamine, 4-chloro- (OR) p-Chloroaniline (H)										X			X	X	
P026	1-(o-Chlorophenyl)thiourea (OR) Thiourea, (2-chlorophenyl)- (H)										X			X	X	
P028	Benzene, (chloromethyl)- (OR) Benzyl chloride (H)										X			X	X	
P037	2,7:3,6-Dimethanonaphth<2,3-b>oxirene, 3,4,5,6,9,9- hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta, 2aalpha, 3beta, 6beta, 6aalpha, 7beta, 7aalpha)- (OR) Dieldrin (H)										X			X	X	
P038	Arsine, diethyl- (OR) Diethylarsine (H)										X			X	X	
P050	6,9-Methano-2,4,3 benzodioxathiepin,6,7,8,9,10, 10- hexachloro-1,5,5a,6,9,9a-hexahydro-,3-oxide (OR) Endosulfan (H)										X			X	X	
P051	2,7:3,6-Dimethanonaphth<2,3-b>oxirene, 3,4,5,6,9,9- hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta, 2abeta, 3alpha, 6alpha, 6abeta, 7beta, 7aalpha)- & metabolites (OR) Endrin (OR) Endrin, & metabolites (H)										X			X	X	
P054	Aziridine (OR) Ethyleneimine (H)										X			X	X	
P058	Acetic acid, fluoro-, sodium salt (OR) Fluoroacetic acid, sodium salt (H)										X			X	X	
P059	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro- 3a,4,7,7a-tetrahydro- (OR) Heptachlor (H)										X			X	X	
P060	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha, 4alpha, 4abeta, 5beta, 8beta, 8abeta)- (OR) Isodrin (H)										X			X	X	
P067	1,2-Propylenimine (OR) Aziridine, 2-methyl- (H)										X			X	X	
P068	Hydrazine, methyl- (OR) Methyl hydrazine (H)										X			X	X	
P071	Methyl parathion (OR) Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester (H)										X			X	X	
P072	alpha-Naphthylthiourea (OR) Thiourea, 1-naphthalenyl- (H)										X			X	X	
P073	Nickel carbonyl (OR) Nickel carbonyl Ni(CO)4, (T-4)- (H)										X			X	X	
P075	Nicotine, & salts (OR) Pyridine, 3-(1-methyl-2-pyrrolidinyl)-,(S)-, & salts (H)										X			X	X	
P076	Nitric oxide (OR) Nitrogen oxide NO (H)										X			X	X	
P078	Nitrogen dioxide (OR) Nitrogen oxide NO2 (H)										X			X	X	

TABLE 2-1A
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						PRO	CESS S	SYSTE	M HAN	DLING	G WAS	TE				$\overline{}$
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite
P087	Osmium oxide OsO4, (T-4)- (OR) Osmium tetroxide (H)										X			X	X	
P088	7-Oxabicyclo<2.2.1>heptane-2,3-dicarboxylic acid (OR) Endothall (H)										X			X	X	
P089	Parathion (OR) Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester (H)										X			X	X	
P092	Mercury, (acetato-O)phenyl- (OR) Phenylmercury acetate (H)										X			X	X	
P102	2-Propyn-1-ol (OR) Propargyl alcohol (H)										X			X	X	
P103	Selenourea (H)										X			X	X	
P105	Sodium azide (H)										X			X	X	
P108	Strychnidin-10-one, & salts (OR) Strychnine, & salts (H)										X			X	X	
P110	Plumbane, tetraethyl- (OR) Tetraethyl lead (H)										X			X	X	
P113	Thallic oxide (OR) Thallium oxide Tl2O3 (H)										X			X	X	
P114	Selenious acid, dithallium (1+) salt (OR) Thallium(I) selenite (H)										X			X	X	
P115	Sulfuric acid, dithallium (1+) salt (OR) Thallium(I) sulfate (H)										X			X	X	
P120	Vanadium oxide V2O5 (OR) Vanadium pentoxide (H)										X			X	X	
P127	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate (OR) Carbofuran (H)										X			X	X	
P128	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester) (H)										X			X	X	
P185	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O(methylamino)-carbonyl oxime (OR) Tirpate (H)										X			X	X	
	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8, 8a-hexahydro-1,3a,8-trimethylpyrrolo.2,3-b indol-5-yl methylcarbamate ester (1:1) (OR) Physostigmine salicylate (H)										X			X	X	
P189	Carbamic acid, .(dibutylamino)-thio methyl-, 2,3-dihydro-2, 2-dimethyl -7-benzofuranyl ester (OR) Carbosulfan (H)										X			X	X	
P190	Carbamic acid, methyl-, 3-methylphenyl ester (OR) Metolcarb (H)										X			X	X	
P191	Carbamic acid, dimethyl-, 1(dimethyl-amino)carbonyl - 5-methyl-1H- pyrazol-3-yl ester (OR) Dimetilan (H)										X			X	X	
P192	Isolan (OR) Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester (H)										X			X	X	

TABLE 2-1A
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						PRO	CESS S	SYSTE	M HAN	DLIN	G WAS	TE				
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite
D I G/I	Ethanimidothioc acid, 2-(dimethylamino)-N(methylamino) carbonyl oxy -2-oxo-, methyl ester (OR) Oxamyl (H)										X			X	X	
D106	Manganese dimethyldithiocarbamate (OR) Manganese, bis(dimethylcarbamodithioato- S,S')-, (H)										X			X	X	
P197	Formparanate (OR) Methanimidamide, N,N-dimethyl-N'2-methyl-4(methylamino)carbonyloxyphenyl- (H)										X			X	X	
P198	Methanimidamide, N,N-dimethyl-N'3(methylamino)-carbonyl oxy phenyl-,monohydrochloride (OR) Formetanate hydrochloride (H)										X			X	X	
P199	Methiocarb (OR) Mexacarbate (OR) Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate (H)										X			X	X	
P201	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate (OR) Promecarb (H)										X			X	X	
P202	m-Cumenyl methylcarbamate (OR) 3-Isopropylphenyl N-methylcarbamate (OR) Phenol, 3-(1-methylethyl)-, methyl carbamate (H)										X			X	X	
P203	Aldicarb sulfone (OR) Propanal, 2-methyl-2-(methyl-sulfonyl)-, O(methylamino)carbonyl  oxime (H)										X			X	X	
P204	Physostigmine (OR) Pyrrolo.2,3-b indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1, 3a,8-trimethyl-methylcarbamate (ester),(3aS-cis)- (H)										X			X	X	
P205	Zinc, bis(dimethylcarbamodithioato-S,S')-, (OR) Ziram (H)										X			X	X	
	2-Propanone (I) (OR) Acetone (I)	X		X	X	X			X		X	X		X	X	X
U003	Acetonitrile (I,T)	X		X	X	X			X		X			X	X	X
U004	Acetophenone (OR) Ethanone, 1-phenyl-			X							X			X	X	
U019	Benzene (I,T)	X		X	X	X			X	X	X			X	X	X
U031	1-Butanol (I) (OR) n-Butyl alcohol (I)	X		X	X	X			X		X			X	X	X
U037	Benzene, chloro- (OR) Chlorobenzene	X		X	X	X			X		X			X	X	X
U043	Ethene, chloro- (OR) Vinyl chloride			X	X						X			X	X	
U044	Chloroform (OR) Methane, trichloro-			X	X						X			X	X	
U051	Creosote			X	X						X			X	X	
U052	Cresol (Cresylic acid) (OR) Phenol, methyl-			X	X						X			X	X	

TABLE 2-1A
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						PRO	CESS S	SYSTE	M HAN	NDLING	G WAS	TE				
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite
U055	Benzene, (1-methylethyl)- (I) (OR) Cumene (I)			X	X						X			X	X	
U056	Benzene, hexahydro- (I) (OR) Cyclohexane (I)	X		X	X	X			X		X			X	X	X
U057	Cyclohexanone (I)	X		X	X	X			X		X	X		X	X	X
U070	Benzene, 1,2-dichloro- (OR) o-Dichlorobenzene	X		X	X	X			X	X	X			X	X	X
U071	Benzene, 1,3-dichloro- (OR) m-Dichlorobenzene	X		X	X	X			X	X	X			X	X	X
U072	Benzene, 1,4-dichloro- (OR) p-Dichlorobenzene	X		X	X	X			X	X	X			X	X	X
U080	Methane, dichloro- (OR) Methylene chloride	X		X	X	X			X		X	X		X	X	X
U108	1,4-Diethyleneoxide (OR) 1,4-Dioxane			X	X				X	X	X			X	X	X
U110	1-Propanimine, N-propyl-(I) (OR) Dipropylamine (I)										X			X	X	
U112	Acetic acid ethyl ester (I) (OR) Ethyl acetate (I)	X		X	X	X			X		X			X	X	
U121	Methane, trichlorofluoro- (OR) Trichloromonofluoromethane	X		X	X	X			X		X			X	X	X
U122	Formaldehyde			X					X	X	X			X	X	
U133	Hydrazine (R,T)										X			X	X	
U134	Hydrofluoric acid (C,T) (OR) Hydrogen fluoride (C,T)						X	X			X			X	X	
U140	1-Propanol, 2-methyl- (I,T) (OR) Isobutyl alcohol (I,T)	X		X	X	X			X		X			X	X	X
U151	Mercury										X			X	X	
U154	Methanol (I) (OR) Methyl alcohol (I)	X		X	X	X			X		X	X		X	X	X
U159	2-Butanone (I,T) (OR) Methyl ethyl ketone (MEK) (I,T)	X		X	X	X			X		X	X		X	X	X
U161	4-Methyl-2-pentanone (I) (OR) Methyl isobutyl ketone (I) (OR) Pentanol, 4-methyl-	X		X	X	X			X		X			X	X	X
U171	2-Nitropropane (I,T) (OR) Propane, 2-nitro- (I,T)			X	X						X			X	X	
U188	Phenol	X		X		X					X			X	X	
U208	1,1,1,2-Tetrachloroethane (OR) Ethane, 1,1,1,2-tetrachloro-	X		X		X			X		X			X	X	X
U209	1,1,2,2-Tetrachloroethane (OR) Ethane, 1,1,2,2-tetrachloro-	X		X		X			X		X			X	X	X
U210	Ethene, tetrachloro- (OR) Tetrachloroethylene	X		X	X	X			X		X	X		X	X	X
U211	Carbon tetrachloride (OR) Methane, tetrachloro-			X	X						X			X	X	
U213	Furan, tetrahydro-(I) (OR) Tetrahydrofuran (I)	X		X	X	X			X		X			X	X	X
U220	Benzene, methyl- (OR) Toluene	X		X	X	X			X		X	X		X	X	X

TABLE 2-1A
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						PRO	CESS S	SYSTE	M HAN	DLING	G WAS	TE				
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite
U226	Ethane, 1,1,1-trichloro- (OR) Methyl chloroform	X		X	X	X			X		X	X		X	X	X
U228	Ethene, trichloro- (OR) Trichloroethylene	X		X	X	X			X		X	X		X	X	X
U239	Benzene, dimethyl- (I,T) (OR) Xylene (I)	X		X	X	X			X		X	X		X	X	X
11777	Benomyl (OR) Carbamic acid, .1(butylamino)carbonyl- 1H-benzimidazol-2-yl-, methyl ester										X			X	X	
	Bendiocarb (OR) 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate										X			X	X	
U279	Carbaryl (OR) 1-Naphthalenol, methylcarbamate										X			X	X	
U280	Barban (OR) Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester										X			X	X	
U364	Bendiocarb phenol (OR) 1,3-benzodioxol-4-ol, 2,2-dimethyl-										X			X	X	
U367	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- (OR) Carbofuran phenol										X			X	X	
U372	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester (OR) Carbendazim										X			X	X	
U373	Carbamic acid, phenyl-, 1-methylethyl ester (OR) Propham										X			X	X	
U387	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester (OR) Prosulfocarb										X			X	X	
U389	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester (OR) Triallate										X			X	X	
U394	A2213 (OR) Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester										X			X	X	
U395	Diethylene glycol, dicarbamate (OR) Ethanol, 2,2'-oxybis-, dicarbamate										X			X	X	
	Ethanamine, N,N-diethyl (OR) Triethylamine										X			X	X	
U409	Carbamic acid, .1,2-phenylenebis (iminocarbonothioyl) bis-, dimethyl ester (OR) Thiophanate-methyl										X			X	X	
U410	Ethanimidothioic acid, N,N'thiobis.(methylimino) carbonyloxybis-, dimethyl ester (OR) Thiodicarb										X			X	X	
U411	Phenol, 2-(1-methylethoxy)-, methylcarbamate (OR) Propoxur										X			X	X	

### Notes:

- 1.) Unless otherwise indicated, all "D", "F", "K", "P", and "U" listed wastes shown above are hazardous due to toxic properties. If not hazardous due to toxicity only, the hazardous properties are indicated in parentheses following the waste description using the notations listed below:
  - (T) = Toxicity, (R) = Reactivity, (I) = Ignitability, (C) = Corrosivity, (H) = Acute Hazardous Waste (refer to 22 CCR 66261.30 for additional information on each waste stream).

TABLE 2-1A
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						PRO	CESS S	SYSTE	M HAN	DLIN	G WAS	TE				
WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite

- 2.) The waste description following "(OR)" in the "Waste Type" column signifies the common name of the material, per 40 CFR 261.30
- 3). Refer to 22 CCR 66261.20 to 66261.33 for full description of the waste codes.
- 4). Organic wastes containing less than 500 ppmw of volatile organic compounds may be stabilized to remove free liquids in the roll-off bin located in this process area. These organic wastes may carry any codes associated with waste destined for solids consolidation.

TABLE 2-2A

CALIFORNIA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						PRO	CESS	SYSTI	ЕМ НА	NDLIN	IG WAST	Έ				
WASTE CODE	WASTE TYPE	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Aqueous Treatment	Neutralization	Inorganic Treatment (note 2)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite
121	Alkaline solution (pH > 12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)					X	X	X			X		X	X	X	
122	Alkaline solution without metals (pH > 12.5)					X	X	X			X		X	X	X	
123	Unspecified alkaline solution					X	X	X			X	X	X	X	X	
131	Aqueous solution ( $2 < pH < 12.5$ ) containing reactive anions (azide, bromate, chlorate, cyanide, fluoride, hypochlorite, nitrite, perchlorate, and sulfide anions)					X		X			X		X	X	X	
132	Aqueous solution with metals (< restricted levels and see waste code 121 for a list of metals)		X			X		X			X	X	X	X	X	
133	Aqueous solution with 10% or more total organic residues		X	X	X	X		X			X	X	X	X	X	
134	Aqueous solution with less than 10% total organic residues		X	X	X	X		X			X	X	X	X	X	
135	Unspecified aqueous solution		X	X	X	X		X			X	X	X	X	X	X
141	Off-specification, aged, or surplus inorganics					X	X	X	X	X	X	X	X	X	X	X
151	Asbestos-containing waste										X		X	X	X	
161	Fluid-cracking catalyst (FCC) waste			X	X				X		X		X	X	X	
162	Other spent catalyst			X	X				X		X		X	X	X	
171	Metal sludge (see 121)							X	X		X		X	X	X	
172	Metal dust (see 121) and machining waste							X	X		X		X	X	X	
181	Other inorganic solid waste			X					X	X	X		X	X	X	X
211	(2) Organics: Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)	X		X	X	X			X	X	X	X	X	X	X	X
212	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)	X		X	X	X			X	X	X	X	X	X	X	X
213	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)	X		X	X				X	X	X	X	X	X	X	X
214	Unspecified solvent mixture	X		X	X	X		X	X	X	X	X	X	X	X	X
221	Waste oil and mixed oil			X	X	X					X	X	X	X	X	X
222	Oil/water separation sludge			X	X	X		X			X		X	X	X	
223	Unspecified oil-containing waste			X	X	X		X	X	X	X	X	X	X	X	X
231	Pesticide rinse water			X				X			X		X	X	X	
232	Pesticides and other waste associated with pesticide production								X	X	X	X	X	X	X	
241	Tank bottom waste			X	X				X	X	X		X	X	X	
251	Still bottoms with halogenated organics	X		X	X				X	X	X		X	X	X	
252	Other still bottom waste	X		X	X				X		X		X	X	X	

TABLE 2-2A

CALIFORNIA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						PRO	CESS	SYSTI	ЕМ НА	NDLIN	IG WAST	E				
WASTE CODE	WASTE TYPE	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Aqueous Treatment	Neutralization	Inorganic Treatment (note 2)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite
261	Polychlorinated biphenyls and material containing PCBs			X	X	X			X	X	X		X	X	X	
271	Organic monomer waste (includes unreacted resins)			X	X				X	X	X		X	X	X	
272	Polymeric resin waste			X	X				X	X	X		X	X	X	
281	Adhesives			X	X	X			X	X	X	X	X	X	X	X
291	Latex waste			X	X	X			X	X	X	X	X	X	X	X
311	Pharmaceutical waste			X	X		X	X	X	X	X		X	X	X	
	Off-specification, aged, or surplus organics	X		X	X	X			X	X	X	X	X	X	X	X
341	Organic liquids (nonsolvents) with halogens	X		X	X	X					X	X	X	X	X	
342	Organic liquids with metals (see 121)	X		X	X	X					X	X	X	X	X	X
343	Unspecified organic liquid mixture	X	X	X	X	X					X	X	X	X	X	X
351	Organic solids with halogens			X	X				X	X	X		X	X	X	X
352	Other organic solids			X	X				X	X	X		X	X	X	X
411	Alum and gypsum sludge								X		X		X	X	X	
421	Lime sludge								X		X		X	X	X	
431	Phosphate sludge							X	X		X		X	X	X	
441	Sulfur sludge							X	X		X		X	X	X	
451	Degreasing sludge			X	X			X	X		X		X	X	X	X
461	Paint sludge			X	X			X	X		X		X	X	X	X
471	Paper sludge/pulp			X	X			X	X		X		X	X	X	
481	Tetraethyl lead sludge										X		X	X	X	
491	Unspecified sludge waste			X	X			X	X	X	X		X	X	X	X
	Empty pesticide containers 30 gallons or more								X	X	X		X	X	X	X
512	Other empty containers 30 gallons or more								X	X	X		X	X	X	X
513	Empty containers less than 30 gallons								X	X	X		X	X	X	X
521	Drilling mud					X		X					X	X	X	
531	Chemical toilet waste							X					X	X	X	
541	Photochemicals/photoprocessing waste					X		X	X	X	X		X	X	X	
	Laboratory waste chemicals	X		X	X	X	X	X	X		X	X	X	X	X	X
	Detergent and soap				X	X		X	X		X	X	X	X	X	
	Fly ash, bottom ash, and retort ash							X	X				X	X	X	
	Gas scrubber waste							X					X	X	X	
591	Baghouse waste							X					X	X	X	X

TABLE 2-2A

CALIFORNIA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS APPLIED FOR IN ROMIC PART B APPLICATION

						PRO	CESS	SYSTI	ЕМ НА	NDLIN	IG WAST	Έ				
WASTE CODE	WASTE TYPE	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Aqueous Treatment	Neutralization	Inorganic Treatment (note 2)	Solids Consolidation	Debris Shredding	Small Container Management	Aerosol Depressurization	Drum Crush	Truck Wash	Off-Site Transfer/Storage	Generated Onsite
611	Contaminated soil from site clean-ups							X	X				X	X	X	X
612	Household waste	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
613	Auto shredder waste								X	X			X	X	X	
711	Liquids with cyanides ≥ 1,000 mg/L										X				X	
721	Liquids with arsenic $\geq$ 500 mg/l	X		X	X		X	X			X		X	X	X	
722	Liquids with cadmium ≥ 100 mg/l	X		X	X		X	X			X		X	X	X	
723	Liquids with chromium (VI) ≥ 500 mg/l	X		X	X		X	X			X		X	X	X	
724	Liquids with lead ≥ 500 mg/l	X		X	X		X	X			X		X	X	X	
725	Liquids with mercury ≥ 20 mg/l	X		X	X			X			X		X	X	X	
726	Liquids with nickel ≥ 134 mg/l	X		X	X	X		X			X		X	X	X	
727	Liquids with selenium ≥ 100 mg/l	X		X	X	X		X			X		X	X	X	
728	Liquids with thallium $\geq 130 \text{ mg/l}$	X		X	X	X		X			X		X	X	X	
741	Liquids with halogenated organic compounds ≥ 1000 mg/l	X		X	X	X					X		X	X	X	X
751	Solids or sludges with halogenated organic compounds ≥ 1000 mg/kg	X		X	X				X	X	X		X	X	X	X
791	Liquids with pH $\leq 2$			X	X	X	X	X			X			X	X	
792	Liquids with pH $\leq$ 2 with metals			X	X	X	X	X			X			X	X	
801	Waste potentially containing dioxins					X			X					X	X	

#### **Notes:**

<sup>1).</sup> These wastes are hazardous by definition under 22 CCR 66261 (incl. articles 3-4, and Appendix XII). Some of the wastes listed above may also carry applicable EPA waste codes (see Table C-1)

<sup>2).</sup> Organic wastes containing less than 500 ppmw of volatile organic compounds may be stabilized to remove free liquids in the roll-off bin located in this process area. s associated with waste destined for solids consolidation

TABLE 2-3
SUMMARY OF EXISTING AND PLANNED DTSC REGULATED STORAGE TANKS INCLUDED IN CEQA BASELINE\*

	CURRENTL	Y PERMITTED*			AS REQUESTED IN	PERMIT APPLICATION	N .
Tank Identification	Location	Function	Capacity (gal)	Tank Identification	Location	Function	Capacity (gal) **
А	Tank Farm C	Storage	5800	Α	Tank Farm CLR	Storage & Treatment	6000
В	Tank Farm C	Storage	5800	В	Tank Farm CLR	Storage & Treatment	6000
С	Tank Farm C	Storage	5800	С	Tank Farm CLR	Storage & Treatment	6000
D	Tank Farm C	Storage	5800	D	Tank Farm CLR	Storage & Treatment	6000
Е	Tank Farm C	Storage	5800	E	Tank Farm CLR	Storage & Treatment	6000
F	Tank Farm C	Storage	5800	F	Tank Farm CLR	Storage & Treatment	6000
G	Tank Farm C	Storage	5800	G	Tank Farm CLR	Storage & Treatment	6000
Н	Tank Farm C	Storage	5800	Н	Tank Farm CLR	Storage & Treatment	6000
I	Tank Farm C	Storage	5600	I	Tank Farm CLR	Storage & Treatment	6000
J	Tank Farm R	Storage	5600	J	has been dropped	Storage & Treatment	
K	Tank Farm A	Storage & Treatment	8000	K	Tank Farm A	Storage & Treatment	9230
L	Tank Farm A	Storage & Treatment	8000	L	Tank Farm A	Storage & Treatment	9230
M	Tank Farm A	Storage & Treatment	8000	М	Tank Farm A	Storage & Treatment	9230
N	Tank Farm E	Storage & Treatment	8000	N	Tank Farm E	Storage & Treatment	9290
0	Tank Farm E	Storage & Treatment	8000	0	Tank Farm E	Storage & Treatment	9290
2	Tank Farm A	Storage	5000	2	Tank Farm A	Storage & Treatment	5100
3	Tank Farm A	Storage	5000	3	Tank Farm A	Storage & Treatment	5100
5	Tank Farm A	Storage	6000	5	Tank Farm A	Storage & Treatment	6360
6	Tank Farm A	Storage	5000	6	Tank Farm A	Storage & Treatment	5100
7	Tank Farm A	Storage	5000	7	Tank Farm A	Storage & Treatment	5100
9	Tank Farm A	Storage	6000	9	Tank Farm A	Storage & Treatment	6360
10	Tank Farm A	Storage	5000	10	Tank Farm A	Storage & Treatment	5100
11	Tank Farm A	Storage	5000	11	Tank Farm A	Storage & Treatment	5100
R-91	Tank Farm B	Storage & Treatment	4500	R-91	Tank Farm B	Storage & Treatment	4760
R-92	Tank Farm B	Storage & Treatment	4500	R-92	Tank Farm B	Storage & Treatment	4760
R-93	Tank Farm B	Storage & Treatment	4500	R-93	Tank Farm B	Storage & Treatment	4760
R-94	Tank Farm B	Storage & Treatment	4500	R-94	Tank Farm B	Storage & Treatment	4760
R-95	Tank Farm B	Storage & Treatment	4500	R-95	Tank Farm B	Storage & Treatment	4760
R-96	Tank Farm D	Storage & Treatment	4500	R-96	Tank Farm D	Storage & Treatment	4500
R-97	Tank Farm D	Storage & Treatment	4500	R-97	Tank Farm D	Storage & Treatment	4500
A-1	Tank Farm F	Storage	2000	A-1	has been dropped		
A-2	Tank Farm F	Storage	2000	A-2	Tank Farm F	Treatment Only	
A-3	Tank Farm F	Storage	2000	A-3	Tank Farm F	Treatment Only	
A-4	Tank Farm F	Storage	2000	A-4	Tank Farm F	Treatment Only	
A-5	Tank Farm F	Storage	2000	A-5	Tank Farm F	Treatment Only	
A-6	Tank Farm E	Storage	6000	A-6	Tank Farm E	Storage & Treatment	4794
A-7	Tank Farm E	Storage	6000	A-7	Tank Farm E	Storage & Treatment	4794
78	Tank Farm I	Storage	12000	83	Tank Farm I	Storage & Treatment	12000
79	Tank Farm I	Storage	12000	84	Tank Farm I	Storage & Treatment	12000
80	Tank Farm I	Storage	12000	85	Tank Farm I	Storage & Treatment	12000
81	Tank Farm Q	Storage	3000	81	Tank Farm Q	Storage & Treatment	3000
82	Tank Farm I	Storage	12000	101	Tank Farm I	Storage & Treatment	12000
83	Tank Farm I	Storage	12000	102	Tank Farm I	Storage & Treatment	12000
84	Tank Farm I	Storage	12000	104	Tank Farm I	Storage & Treatment	12000

TABLE 2-3
SUMMARY OF EXISTING AND PLANNED DTSC REGULATED STORAGE TANKS INCLUDED IN CEQA BASELINE\*

	CURRENTLY	PERMITTED*		AS	S REQUESTED IN	PERMIT APPLICATION	N
Tank Identification	Location	Function	Capacity (gal)	Tank Identification	Location	Function	Capacity (gal) **
85	Tank Farm I	Storage	12000	103	Tank Farm I	Storage & Treatment	12000
86	Tank Farm Q	Storage	1500	86	Tank Farm Q	Storage & Treatment	1500
87	Tank Farm Q	Storage	200	87	Tank Farm Q	Storage & Treatment	200
88	Tank Farm Q	Storage	1500	88	Tank Farm Q	Storage & Treatment	1500
89	Tank Farm Q	Storage	200	89	Tank Farm Q	Storage & Treatment	200
90	Tank Farm E	Storage	6000	90	Tank Farm E	Storage & Treatment	4794
Total		50	289,500		44		281,172
Planned	17						
Existing	33						
	Planned Tanks						
	Existing Tanks With (	Changed Identification	1				
*Tanks authorized in	n 1989 Operating Per	mit, 1990 Permit Mo	dification and 1992 Perm	it.			
** Approximate capa	cities. See Draft Haz	ardous Waste Facility	Permit for details				

TABLE 2-4
SUMMARY OF EXISTING TANKS NOT REGULATED BY DTSC

Unit ID	Volume (gals)
25	4,600
60	13,000
62	13,600
63	20,000
66	24,823
67	20,616
68	30,000
69	24,823
70	126,904
71	28,000
72	2,000
73	11,990
74	11,990
76	27,637
77	27,088
96	11,750
97	11,750

Note: No new unregulated tanks are planned. Source: Table D-6 of Romic's Part B Application

TABLE 2-5
SUMMARY OF EXISTING AND PLANNED STORAGE TANKS - PART OF PROJECT

k Identification	Location	Function	Capacity (gal)	Tank Identification	Location	Function	Capacity (gal)
1	TF A	Storage & Treatment	4,200	64	TF Q	Storage & Treatment	19,400
4	TF A	Storage & Treatment	4,500	65	TF Q	Storage & Treatment	19,400
8	TF A	Storage & Treatment	4,500	75	TF Q	Storage & Treatment	12,700
12	TF A	Storage & Treatment	4,500	AES1	TF Q	Storage	11,160
16	TF G	Storage & Treatment	2,000	AES2	TF Q	Storage	11,160
17	TF G	Storage & Treatment	2,000	AES3	TF Q	Storage	11,160
18	TF G	Storage & Treatment	540	AES4	TF Q	Storage	11,160
19	TF G	Storage & Treatment	2,000	Caustic Reboiler	PA	Storage & Treatment	2,200
20	TF G	Storage & Treatment	2,000	SSK	PA	Storage & Treatment	1,600
21	TF G	Storage	1,900	WWT	PA	Storage & Treatment	4,000
26	TF H	Storage & Treatment	8,800	V24	PA	Storage & Treatment	1,450
27	TF H	Storage & Treatment	8,800	V25	PA	Storage & Treatment	2,300
28	TF H	Storage & Treatment	8,800	T-24	TF R	Storage & Treatment	3,400
29	TF H	Storage & Treatment	8,800	T-25	TF R	Storage & Treatment	3,400
30	TF H	Storage & Treatment	8,800	HTU	HTU	Storage & Treatment	1,200
31	TF H	Storage & Treatment	8,800	HTU-1	HTU	Storage & Treatment	474
32	MNO	Storage & Treatment	8,800	HTU-2	HTU	Storage & Treatment	330
33	MNO	Storage & Treatment	8,800	78	TF S	Storage & Treatment	12,000
34	MNO	Storage & Treatment	8,800	80	TF S	Storage & Treatment	12,000
35	MNO	Storage & Treatment	8,800	105	TF Q	Storage & Treatment	11,175
36	MNO	Storage & Treatment	8,800	106	TF T	Storage	8,500
37	MNO	Storage & Treatment	8,800	107	TF T	Storage	8,500
38	MNO	Storage & Treatment	8,800	108	TF T	Storage	8,500
39	MNO	Storage & Treatment	8,800	109	TF T	Storage	8,500
40	MNO	Storage & Treatment	8,800	R-24	PA	Storage & Treatment	850
41	MNO	Storage & Treatment	8,800	R-32	PA	Storage & Treatment	4,100
42	MNO	Storage & Treatment	8,800	R-34	PA	Storage & Treatment	16,500
43	MNO	Storage & Treatment	8,800	R-35	TFI	Storage & Treatment	5,000
44	TFL	Storage & Treatment	8,800	R-36	TFI	Storage & Treatment	7,500
45	TFL	Storage & Treatment	8,800	R-37	TF G	Storage & Treatment	6,100
46	TFL	Storage & Treatment	8,800	R-42	TFI	Storage & Treatment	9,400
47	TFL	Storage & Treatment	8,800	R-43	TFI	Storage & Treatment	7,000
48	TFL	Storage & Treatment	4,000	R-48	TFI	Storage & Treatment	9,300
49	TFL	Storage & Treatment	4,000	R-49	TF G	Storage & Treatment	16,000
50	TFL	Storage & Treatment	4,000	PT-1	Drum & Debris Building	Storage & Treatment	1,160
61	TF Q	Storage & Treatment	13,400	TW-1	Truck Wash	Storage & Treatment	1,700
Subtotals	11 Q	36	247,140	1 44-1	36	Storage & Treatment	270,279
Oublotais		30	247,140		30		210,219
Totals					72		517,419
							,
	Planned Tank						
	*Approximate capacities. See Draft Hazardous Waste Facility Permit for details						

TABLE 2-6
SUMMARY OF EXISTING AND PLANNED DTSC REGULATED PROCESS UNITS INCLUDED IN CEQA BASELINE\*

	CURRENT	LY PERMITTED			STED IN PERMIT A	
Unit Identification	Location	Description	Capacity (gal)	Unit Identification	Location	Function
TF1	PA	Thin Film Unit 1 and Tanks	150	TF1	PA	Treatment Unit
TF2	PA	Thin Film Unit 2 and Tanks	190	TF2	PA	Treatment Unit
TF3	PA	Thin Film Unit 3 and Tanks	190	TF3	PA	Treatment Unit
TF #4	PA	Thin Film 4 & Tanks	150.0	TF #4	PA	Treatment Unit
C49	PA	49" Column and reboiler	1,400	C49	PA	Treatment Unit
R49	TF G	49" Column and reboiler	16,000	R49	TF G	Treatment & Storag
C37	PA	37" Column and reboiler	790	C37	PA	Treatment Unit
R37	TF G	37" Column and reboiler	6,000	R37	TF G	Treatment & Storag
CC	PA	Caustic column and Reboiler	1,035	СС	PA	Treatment Unit
C Reboiler	PA	Caustic column and Reboiler	1,300	C Reboiler	PA	Treatment & Storag
V24	PA	Vacuum pot #24 and Tank	1,000	V24	PA	Treatment & Storag
V25	PA	Vacuum pot #25 and Tank	2,000	V25	PA	Treatment & Storag
C36	PA	36" Column and reboiler	790	C36	PA	Treatment Unit
R36	TFI	36" Column and reboiler	6,000	R36	TFI	Treatment & Storag
C42	PA	42" Column and reboiler	1,060	C42	PA	Treatment Unit
R42	TF I	42" Column and reboiler	10,000	R42	TFI	Treatment & Storag
C32	PA	32" column and reboiler	630	C32	PA	Treatment Unit
R32	PA	32" column and reboiler	3,100	R32	PA	Treatment & Storag
C24	PA	24" Column and reboiler	350	C24	PA	Treatment Unit
R24	PA	24" Column and reboiler	700	R24	PA	Treatment & Storac
C48	PA	48" Column and reboiler	1,400	C48	PA	Treatment Unit
R48	TFI	48" Column and reboiler	7,500	R48	TFI	Treatment & Storag
C35	PA	35" Column and reboiler	790	C35	PA	Treatment Unit
R35	TFI	35" Column and reboiler	3,500	R35	TFI	Treatment & Storag
C43	PA	43" Column and reboiler	1,060	C43	PA	Treatment Unit
C34	PA	34" Column	790	C34	PA	Treatment Unit
SSK	PA	SS Kettle	1000	SSK	PA	Treatment & Storag
NT-1	TF J	Neutralization system	500	NT-1	TF J	Treatment Tank
NT-2	TF J	Neutralization system	500	NT-2	TF J	Treatment Tank
NT-3	TF J	Neutralization system	500	NT-3	TF J	Treatment Tank
Liquefaction Unit	Liq Build	Liquefaction System		Liquefaction Unit	Liq Build	Treatment Unit
wwT	PA	Caustic column and Reboiler	4,000	wwT	PA	Treatment & Storage
B-2	TF K	Biotreatment	25000	B-2	TF K	Treatment Tank
B-3	TF K	Biotreatment	25000	B-3	TF K	Treatment Tank
B-3A	TF K	Biotreatment	25000	B-3A	TF K	Treatment Tank
B-4	TF K	Biotreatment	16000	B-4	TF K	Treatment Tank
B-4A	TF K	Biotreatment	16000	B-4A	TF K	Treatment Tank
B-5	TF K	Biotreatment	5000	B-5	TF K	Treatment Tank
B-6	TF K	Biotreatment	5000	B-6	TF K	Treatment Tank
B-6A	TF K	Biotreatment	5000	B-6A	TF K	Treatment Tank
B-7	TF K	Biotreatment	5000	B-7	TF K	Treatment Tank
T-13	TF K	Biotreatment	25000	T-13	TF K	Treatment Tank
Lab Pack	West 2	Lab Pack		Lab Pack	West 2	Treatment Unit
otal Units	43				43	
Total New Units	2				2	
	Planned Units					

TABLE 2-7
SUMMARY OF EXISTING AND PLANNED PROCESS UNITS - PART OF PROJECT

		STED IN PERMIT APPL			CURRENTLY PERMITTED*
Unit Identification	Location	Description	Capacity	Process	Tank Capacity**
K	Tank Farm A	Fuel Blend	10 gpm	Treat. & Stor. Tank	8,000 gallons
L	Tank Farm A	Fuel Blend	10 gpm	Treat. & Stor. Tank	8,000 gallons
М	Tank Farm A	Fuel Blend	10 gpm	Treat. & Stor. Tank	8,000 gallons
1	Tank Farm A	Thin Film 1&4 Receiving Tank	see thin film	Treat. & Stor. Tank	
2	Tank Farm A	Fuel Blend	10 gpm	Treat. & Stor. Tank	5,000 gallons
3	Tank Farm A	Fuel Blend	10 gpm	Treat. & Stor. Tank	5,000 gallons
4	Tank Farm A	Thin Film 1&4 Receiving Tank	see thin film	Treat. & Stor. Tank	
5	Tank Farm A	Fuel Blend	10 gpm	Treat. & Stor. Tank	6,000 gallons
6	Tank Farm A	Fuel Blend	10 gpm	Treat. & Stor. Tank	5,000 gallons
7	Tank Farm A	Fuel Blend	10 gpm	Treat. & Stor. Tank	5,000 gallons
8	Tank Farm A	Thin Film 2 Receiving Tank	see thin film	Treat. & Stor. Tank	
9	Tank Farm A	Fuel Blend	10 gpm	Treat. & Stor. Tank	6,000 gallons
10	Tank Farm A	Fuel Blend	10 gpm	Treat. & Stor. Tank	5,000 gallons
11	Tank Farm A	Fuel Blend	10 gpm	Treat. & Stor. Tank	5,000 gallons
12	Tank Farm A	Thin Film 3 Receiving Tank	see thin film	Treat. & Stor. Tank	
16	Tank Farm G	Fuel Blend	10 gpm	Treat. & Stor. Tank	
17	Tank Farm G	Fuel Blend	10 gpm	Treat. & Stor. Tank	
18	Tank Farm G	Fuel Blend	10 gpm	Treat. & Stor. Tank	
19	Tank Farm G	Fuel Blend	10 gpm	Treat. & Stor. Tank	
20	Tank Farm G	Fuel Blend	10 gpm	Treat. & Stor. Tank	
26	Tank Farm H	Fuel Blend	10 gpm	Treat. & Stor. Tank	
27	Tank Farm H	Fuel Blend	10 gpm	Treat. & Stor. Tank	
28	Tank Farm H	Fuel Blend	10 gpm	Treat. & Stor. Tank	
29	Tank Farm H	Fuel Blend	10 gpm	Treat. & Stor. Tank	
30	Tank Farm H	Fuel Blend	10 gpm	Treat. & Stor. Tank	
31	Tank Farm H	Fuel Blend	10 gpm	Treat. & Stor. Tank	
32	Tank Farm MNO	Fuel Blend	10 gpm	Treat. & Stor. Tank	
33	Tank Farm MNO	Fuel Blend	10 gpm	Treat. & Stor. Tank	
34	Tank Farm MNO	Fuel Blend	10 gpm	Treat. & Stor. Tank	
35	Tank Farm MNO	Fuel Blend	10 gpm	Treat. & Stor. Tank	
36	Tank Farm MNO	Fuel Blend	10 gpm	Treat. & Stor. Tank	
37	Tank Farm MNO	Fuel Blend	10 gpm	Treat. & Stor. Tank	
38	Tank Farm MNO	Fuel Blend	10 gpm	Treat. & Stor. Tank	
39	Tank Farm MNO	Fuel Blend	10 gpm	Treat. & Stor. Tank	
40	Tank Farm MNO	Fuel Blend	10 gpm	Treat. & Stor. Tank	
41	Tank Farm MNO Tank Farm MNO	Fuel Blend	10 gpm	Treat. & Stor. Tank	
42 43		Fuel Blend Fuel Blend	10 gpm	Treat. & Stor. Tank	
	Tank Farm MNO		10 gpm	Treat. & Stor. Tank	
44 45	Tank Farm CLR Tank Farm CLR	Fuel Blend Fuel Blend	10 gpm	Treat. & Stor. Tank	
46	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	
47	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	
48	Tank Farm CLR	Fuel Blend	10 gpm 10 gpm	Treat. & Stor. Tank Treat. & Stor. Tank	
49	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	
50	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	
61	Tank Farm Q	Fuel Blend	10 gpm	Treat. & Stor. Tank	
64	Tank Farm Q	Fuel Blend	10 gpm	Treat. & Stor. Tank	
65	Tank Farm Q	Fuel Blend	10 gpm	Treat. & Stor. Tank	
75	Tank Farm Q	Fuel Blend	10 gpm	Treat. & Stor. Tank	
83* (78)	Tank Farm I	Fuel Blend	10 gpm	Treat. & Stor. Tank	12,000 gallons
84* (79)	Tank Farm I	Fuel Blend	10 gpm	Treat. & Stor. Tank	12,000 gallons
85* (80)	Tank Farm I	Fuel Blend	10 gpm	Treat. & Stor. Tank	12,000 gallons
101* (82)	Tank Farm I	Fuel Blend	10 gpm	Treat. & Stor. Tank	12,000 gallons
101 (82)	Tank Farm I	Fuel Blend	10 gpm	Treat. & Stor. Tank  Treat. & Stor. Tank	12,000 gallons
103* (85)	Tank Farm I	Fuel Blend	10 gpm	Treat. & Stor. Tank	12,000 gallons
104* (84)	Tank Farm I	Fuel Blend	10 gpm	Treat. & Stor. Tank	12,000 gallons
		Vacuum pot #24 and Tank -			
T-24	Tank Farm R	Distillation	5 gpm	Treat. & Stor. Tank	

### TABLE 2-7 SUMMARY OF EXISTING AND PLANNED PROCESS UNITS - PART OF PROJECT

	AS REQUE	STED IN PERMIT APPL			CURRENTLY PER	
Unit Identification	Location	Description	Capacity	Process	Tank Capaci	ty**
T-25	Tank Farm R	Vacuum pot #25 and Tank -	5 gpm	T		
HTU	High Temperature Unit	Distillation High Temp Unit	5 gpm	Treat. & Stor. Tank Treat. & Stor. Tank		
HTU-1	High Temperature Unit	High Temp Unit	5 gpm	Treat. & Stor. Tank		
HTU-2	High Temperature Unit	High Temp Unit	5 gpm	Treat. & Stor. Tank		
R-91	Tank Farm B	Thin Film 4 & Tanks	ű.	+	4 FOO gollono	
R-92	Tank Farm B	Thin Film 4 & Tanks	15.5 gpm	Treat. & Stor. Tank	4,500 gallons	
R-93	Tank Farm B	Thin Film Unit 1 and Tanks	15.5 gpm	Treat. & Stor. Tank Treat. & Stor. Tank	4,500 gallons	
R-94	Tank Farm B	Thin Film Unit 2 and Tanks	8 gpm	Treat. & Stor. Tank  Treat. & Stor. Tank	4,500 gallons	
R-94 R-95			10 gpm		4,500 gallons	
	Tank Farm B	Thin Film Unit 3 and Tanks	10 gpm	Treat. & Stor. Tank	4,500 gallons	
B-8 SF-1	Tank Farm K	Biotreatment	30 gpm	Treat. Tank Only	-	
SF-1 SF-2	Tank Farm K	Sand Filter - Biotreatment	30 gpm	Treat. Only - No Tanks		
-	Tank Farm K	Sand Filter - Biotreatment	30 gpm	Treat. Only - No Tanks		
Carbon Adsorption	Adjacent to Tank Farm K	Biotreatment	see biotreatment	Treat. Only - No Tanks		
Ion Exchange Bed	Adjacent to Tank Farm K	Biotreatment	see biotreatment	Treat. Only - No Tanks		
UV/OX System	Adjacent to Tank Farm K	Biotreatment	see biotreatment	Treat. Only - No Tanks		
R43	Tank Farm I	43" Column and reboiler -	24.5 gpm	Treet Teels Only		
DT /	11 15 11 12 11 11	Distillation	00.0001/-	Treat. Tank Only		
PT-1	Liquifaction Building	Liquefaction System	22,000 gal/day	Treat. Tank Only		
Debris Shredder	Liquifaction Building	Debris Shredder	60,000 lb/day	Treat. Only - No Tanks		
Truck Wash	South of K	Truck Wash	15,000 gal/day	Treat. Only - No Tanks		
TW-1	South of K	Truck Wash		Treat. Tank Only		
Drum Crushers	N. of Liquifaction Bldg.	Drum Crusher	500 gal/hr	Treat. Only - No Tanks		
Α	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	5, 800 gallons	
В	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	5, 800 gallons	
С	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	5, 800 gallons	
D	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	5, 800 gallons	
Е	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	5, 800 gallons	
F	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	5, 800 gallons	***************************************
G	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	5, 800 gallons	
H	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	5, 600 gallons	
1	Tank Farm CLR	Fuel Blend	10 gpm	Treat. & Stor. Tank	5, 600 gallons	
81	Tank Farm Q	Fuel Blend	10 gpm	Treat. & Stor. Tank	3,000 gallons	
86	Tank Farm Q	Fuel Blend	10 gpm	Treat. & Stor. Tank	1,500 gallons	
87	Tank Farm Q	Fuel Blend	10 gpm	Treat. & Stor. Tank	200 gallons	
88	Tank Farm Q	Fuel Blend	10 gpm	Treat. & Stor. Tank	1,500 gallons	
89	Tank Farm Q	Fuel Blend	10 gpm	Treat. & Stor. Tank	200 gallons	
90	Tank Farm E	Fuel Blend	10 gpm	Treat. & Stor. Tank	6,000 gallons	
105	Tank Farm Q	Fuel Blend	10 gpm	Treat. & Stor. Tank		
A-2	Tank Farm F	Inorganic Treatment	5 gpm	Treat. Tank Only	2,000 gallons	
A-3	Tank Farm F	Inorganic Treatment	5 gpm	Treat. Tank Only	2,000 gallons	
A-4	Tank Farm F	Inorganic Treatment	5 gpm	Treat. Tank Only	2,000 gallons	
A-5	Tank Farm F	Inorganic Treatment	5 gpm	Treat. Tank Only	2,000 gallons	
A-6	Tank Farm E	Fuel Blend	10 gpm	Treat. & Stor. Tank	6,000 gallons	
A-7	Tank Farm E	Fuel Blend	10 gpm	Treat. & Stor. Tank	6,000 gallons	
79	Tank Farm S	Treatment	5 gpm	Treatment		
82	Tank Farm S	Treatment	5 gpm	Treatment		
				+	9 000 gallana	
N O	Tank Farm E Tank Farm E	Fuel Blend Fuel Blend	10 gpm	Treat & Store Tank	8,000 gallons	
0 R34	PA	Treatment	10 gpm	Treat & Store Tank	8,000 gallons	
	Tank Farm D		21 gpm	Treat & Stor. Tank	4 500 college	
R-96		Fuel Blend	10 gpm	Treat & Stor. Tank	4,500 gallons	
R-97	Tank Farm D	Fuel Blend	10 gpm	Treat. & Stor. Tank	4,500 gallons	
Aerosol Depressurizn	Portable	Treatment	20 cans/min	Treat. Only - No Tanks		
Consolidation Booth	W. of Liquifaction Bldg.	Treatment	50,000 lb/day	Treat. Only - No Tanks		
Sorting Table	Consolidation Booth	Treatment	50,000 lb/day	Treat. Only - No Tanks		
Filter Press	Tank Farm F	Treatment	20,000 lb/day	Treat. Only - No Tanks		
Stabilization Roll-Offs	Tank Farm F	Treatment	40,000 lb/day	Treat. Only - No Tanks		
Total Units	112					
Reclassified Units					48	
	Planned Units					*************
		<u> </u>				
	* Currently permitted	as hazardous waste tanl	ke Will he renormit	ed as process units		

TABLE 2-8
PROPOSED IMPROVEMENTS TO EXISTING FACILITIES

CATEGORY OF WORK	PROPOSED ACTION	PLANNED COMPLETION
A	Additional anchorage, bracing and foundation work for 7 tanks.	May 2007
В	Additional anchorage and foundation work on 42 tanks and 2 process units	May 2007
С	Additional anchorage, bracing, and foundation work on 19 tanks and 15 process units	May 2006
D	Cease using 10 cone bottom tanks (tanks A-J), remove tanks and replace with 9 flat bottom tanks.	Cease use by July 1, 2004, Start closure process, replace piecemeal or upon receipt of DTSC authorization
	Additional anchorage, bracing and foundation work on 2 tanks and the Mezzanine	completed
E	None required	NA
1	Construction of secondary containment areas for hazardous waste transfer	3-12 months after authorization
2	Combining containment capacity of tank farms C and R and application of concrete sealer and miscellaneous repairs to debris shredder.	4-12 months after authorization.
3	Increasing containment capacity of 3 tank farms and 1 drum storage area, repairing concrete, and application of sealer to concrete.	9-24 months after authorization

### Category of Work Code:

### Seismic

A - No seismic risk

B - Low seismic risk

C - Medium seismic risk

D - High seismic risk

E - Catastrophic seismic risk

Other Upgrades

1 - High priority

2 - Medium priority

3 - Low priority

DRAFT EIR: ROMIC ENVIRONMENTAL Department of Toxic Substances Control

### **TABLE 2-9**

## SUMMARY OF EXISTING AND PROPOSED ONSITE PERMITTED WASTE STORAGE AND TREATMENT UNITS Romic Facility, East Palo Alto, California

UNIT	EXISTING PERMITTED UNITS/CAPACITY	PROPOSED PERMITTED UNITS/CAPACITY
Containers	2,531 55-gallon drums (139,205 gallons)	5,661 drums plus totes* for up to 317,355 gallons
	68 cu. yd. of solids in bins**	320 cu yd. of solids in bins**
Tanks	50 above-ground tanks 241,000 gallons	116 above-ground tanks (793,000 gallons)
Treatment Units	55 process units/up to 154,512 gallons per day	154 process units/up to 154,512 gallons per day
	2 tons of solids per day	85 tons of solids per day

Source: Romic Response to TRC List of Information Needs for EIR

<sup>\*</sup> A tote is a plastic or metal, rectangular bin, 4-feet, by 4-feet in size.

<sup>\*\*</sup> Bins vary in size, holding from 10 to 40 cubic yards of material.

### **TABLE 2-10**

### SUMMARY OF EXISTING AND PROPOSED STORAGE CAPACITIES

LOCATION	EXISTING PERMITTED	PROPOSED PERMITTED
	CAPACITY	CAPACITY
	(gallons)	(gallons)
North Storage Building	33,000	45,650
South Storage Building	160,380	140,580
Sampling Area	52,140	40,755
West Storage Building #1	17,600	18,480
West Storage Building #2	96,800	65,890
Drum Pump	<u>0</u>	<u>6,000</u>
Total Capacity	359,920	317,355
Total Number of Drums for	2,531 drums	5,661 drums
Storing Hazardous Waste		
TOTAL PERMITTED	139,205 gallons <sup>(1)</sup>	317,355 gallons <sup>(2)</sup>
CAPACITY		

- (1) Under the existing permit, hazardous waste is stored only in drums. The maximum number of 55-gallon drums allowed is 2,531, which limits the maximum quantity of waste that can be stored at any time to139,205 gallons. The 139,205 gallons can all be stored in a single building (South Storage Building) or distributed among all of the storage buildings and area.
- (2) The maximum number of 55-gallon drums that will be allowed is 5,661 which equates to 311,355 gallons. The remaining allowed 6,000 gallons is stored in the Drum Pump.

# TABLE 2-11 Romic Environmental Technologies Corporation VIOLATION/COMPLIANCE HISTORY 1999-2005

DATE OF INSPECTION(S)	AGENCY	VIOLATION(S)	CORRECTIVE ACTION/ RETURN TO COMPLIANCE
11/29/99 (Annual Inspection)	DTSC	Storage of hazardous waste in unpermitted tanks.	Disputed, but settled by consent order on 8/1/00
		Storage above permitted capacity.	Corrected
		Incomplete outgoing Manifests.	Corrected
12/27/99 Fire Investigation	DTSC	Storage of incompatible wastes in bin	Disputed, but corrected
		Storage in unauthorized area	Disputed, but corrected
		Storage in excess of the permitted capacity in roll-off bins	Disputed, but corrected
		Failure to follow the waste analysis plan	Disputed, but corrected
		Storage in excess of one year	Disputed, but corrected
		Inaccurate training records	Corrected
		Failure to operate the facility in safe manner due to the fire	Schedule for Compliance Order issued 12/30/99. Treatment process which caused the fire was voluntarily stopped.
		Failure to update the emergency coordinator list	Corrected
		Storage of wastes in an unauthorized area	Disputed, but corrected
		Inaccurate operating record	Disputed, but steps were taken to minimize a reoccurrence.
8/02/00	BAAQMD	Open vent	Plugged vent
8/09/00		Faulty valve/vent No valve as required	Plugged vent Installed valve

DATE OF INSPECTION(S)	AGENCY	VIOLATION(S)	CORRECTIVE ACTION/ RETURN TO COMPLIANCE
9/06/00		Open valves Open valves Valve leak	Closed valve Closed valve Closed valve
10/24/00		Valve leak/liquid leak	Installed new valve
Reporting Year 2000	USEPA	Untimely/inaccurate filing of TRI forms	Report submitted
Annual Inspection 6/4/01	DTSC	Storage of hazardous waste in unauthorized units/areas	Disputed and requested a consent order to remedy the violation. Protocols for consent order are currently under review
		Exceedance of 10 day loading/unloading times	Disputed, but corrected
		Storage of incompatibles	Disputed, but corrected
		Use of damaged containers	Disputed, but corrected
		Storage of wastes in unauthorized units	Disputed and requested a consent order to remedy the violation. Protocols for consent order are currently under review
		Inadequate aisle space between rows of drums	Disputed, but corrected
		Lack of acceptance dates on drums	Corrected
		Improper stacking of drums	Disputed but corrected
		Manifest not signed immediately upon receipt	Corrected
		Failure to indicate Romic Transfer Station as the receiving facility on the manifest	Disputed, but corrected
		Unauthorized treatment	Disputed, ceased activity and requested a consent order to continue conducting treatment activities. The request for a consent order for these activities was denied
		Incomplete inspection log	Disputed, but corrected
		Exceeding permitted storage capacity in tanks	Disputed, but corrected

CA OSHA	Receiving unauthorized waste streams  Deficient operating record  Failure to obtain tank assessment for new tank  Deficient lighting at tanker truck wash area  Need to enhance documented information communication to occupational physician	Disputed, but corrected  Corrected  Corrected  Installed additional lighting, realigned existing lighting  Updated documentation.
CA OSHA	Failure to obtain tank assessment for new tank  Deficient lighting at tanker truck wash area  Need to enhance documented information communication to occupational physician	Installed additional lighting, realigned existing lighting
CA OSHA	assessment for new tank  Deficient lighting at tanker truck wash area  Need to enhance documented information communication to occupational physician	Installed additional lighting, realigned existing lighting
CA OSHA	truck wash area  Need to enhance documented information communication to occupational physician	realigned existing lighting
	documented information communication to occupational physician	Updated documentation.
	conducting medical surveillance and respirator evaluations	
	Deficient documentation of inspection of fall arrest equipment	Violation dropped.
	Lack of carcinogen internal study/report	Filed report.
	Deficiency in respirator use written program	Revised written program.
	Deficiency in permit- required confined space entry program	Corrected deficiency.
BAAOMD		Not applicable
EPASD/ POTW	None None (Industrial wastewater	
MPFPD	None	Not applicable
SMC	Inspections of two eyewash stations not stations.  Inspection tags place stations.	
EPASD/ POTW	(Industrial wastewater	
DTSC	Storage of hazardous waste in unauthorized units/areas	Disputed and requested a consent order to remedy the violation. Protocols for consent order are currently under review
	Storage of hazardous waste in an unauthorized area	Disputed and requested a consent order to remedy the violation. Protocols for consent order are currently under review
	MPFPD SMC EPASD/ POTW	occupational physician conducting medical surveillance and respirator evaluations  Deficient documentation of inspection of fall arrest equipment  Lack of carcinogen internal study/report  Deficiency in respirator use written program  Deficiency in permit-required confined space entry program  BAAQMD No violations  EPASD/ None (Industrial wastewater discharge)  MPFPD None  SMC Inspections of two eyewash stations not documented  EPASD/ None (Industrial wastewater discharge)  DTSC Storage of hazardous waste in unauthorized units/areas

DATE OF INSPECTION(S)	AGENCY	VIOLATION(S)	CORRECTIVE ACTION/ RETURN TO COMPLIANCE
		Unauthorized treatment	Disputed, ceased activity and requested a consent order to continue conducting treatment activities. The request for a consent order for these activities was denied
		Failure to properly record tank levels	Disputed, but corrected
		Failure to note discrepancies on manifests	Corrected
		Failure to maintain accurate operating records	Disputed, but corrected
		Failure to obtain tank assessment for new tank	Corrected
7/22/02	RWQCB	Exceedances of NPDES limits from discharge of treated groundwater from Corrective Action	Exceedances arose from groundwater pump and treat system, not process water; treatment system operating properly, exceedances beyond control of the facility; effluent from system now primarily discharged to POTW; Romic funding Supplemental Environmental Project to control non-native predators in Faber-Laumeister Marsh, habitat for California Clapper Rail
10/3/02	USDOT	None	Not applicable
12/4/02	EPASD/ POTW	None (Industrial wastewater discharge)	None
12/24/02 (limited inspection)	DTSC	Failure to sign and date manifests immediately upon receipt	Corrected
		Failure to maintain accurate operating record	Disputed, but corrected
		Intentional misrepresentation on manifests and operating records	Dispute
3/6/2003	BAAQMD	No violations	Not applicable
Annual Inspection 6/17/03	DTSC	Storage of incompatibles	Corrected
		Unauthorized treatment	Stopped activity, corrected

DATE OF INSPECTION(S)	AGENCY	VIOLATION(S)	CORRECTIVE ACTION/ RETURN TO COMPLIANCE
		Storage in unauthorized areas	Corrected and requested consent order to remedy part of the violation
		Unauthorized modification to a permitted unit	Request retro-active permit modification which was denied by permits. Request was then made for inclusion in Consent Order as means to remedy violation
		Unauthorized modification to approved training plan	Corrected
		Changes to manifest without generator's knowledge	Corrected
Annual Inspection 6/28/2004	DTSC	Storage in unauthorized areas	Corrected
		Receiving unauthorized waste codes	Corrected
		Not providing specific training courses identified in approved training plan	Classes to be given: Compliance in process
		No written job description for an Inplant Driver	Permit modification needed
		No written training description for each job title/position	Permit modification needed

On April 6, 2005, the San Mateo County Superior Court issued a Stipulation for Entry of Final Judgment (Judgment) to Romic, and required Romic to pay a sum of \$849,500 for civil penalties, costs and supplemental environmental projects. In addition, on April 6, 2005 DTSC issued a Consent Order (Order) to Romic. Both Judgment and Order settled violations stemming from violations found by DTSC between 1999 and 2004.

DTSC	- Department of Toxic Substances Control
EPASD	- East Palo Alto Sanitary District
MPFPD	- Menlo Park Fire Protection District
CA OSHA	- California Division of Occupational Health and Safety
POTW	- City of Palo Alto Regional Water Quality Control Plant
RWQCB	- San Francisco Bay Regional Water Quality Control Board
SMC	- San Mateo County Department of Environmental Health
USDOT	- United States Department of Transportation (RSPA)
USEPA	- United States Environmental Protection Agency

- Bay Area Air Quality Management District

BAAQMD

**TABLE 2-12** 

# AMOUNT OF HAZARDOUS WASTE RECEIVED AS A PERCENTAGE OF THE PERMITTED TREATMENT CAPACITY FOR 1993-2003

YEAR	TONNAGE OF HAZARDOUS WASTE RECEIVED	PERCENT OF YEARLY PERMITTED CAPACITY (231,840 tons)*
1993	38,990	17%
1994	37,554	16%
1995	37,546	16%
1996	39,306	17%
1997	43,593	19%
1998	40,748	18%
1999	36,505	16%
2000	40,051	17%
2001	33,136	14%
2002	27,333	12%
2003	26,393	11%

<sup>\*</sup> The daily permitted treatment capacity is 154,512 gallons. This capacity is equal to 1,288,630 pounds (based on one gallon of water = 8.34 pounds) or 644 tons per day. The monthly permitted capacity is 19,320 tons (based on 30 days per month) and the yearly capacity is 231,840 tons.

**TABLE 2-13** 

#### AVERAGE PERCENT OF HAZARDOUS WASTE RECEIVED BASED ON THE FEDERAL WASTE CODES FOR 1993-2003

FEDERAL HAZARDOUS WASTE RECEIVED	FEDERAL CODES	HAZARDOUS WASTE RECEIVED AS A PERCENT OF YEARLY RECEIPTS
Ignitable waste	D001	39%
Corrosive waste	D002	4%
Wastes with low level metals	D004-D011	7%
Wastes with low level organics	D018-D043	4%
Solvents	F001-F005	7%
Surplus chemicals and other	K waste P waste U waste	1%
California-only waste or non-RCRA	None	38%

**TABLE 2-14** 

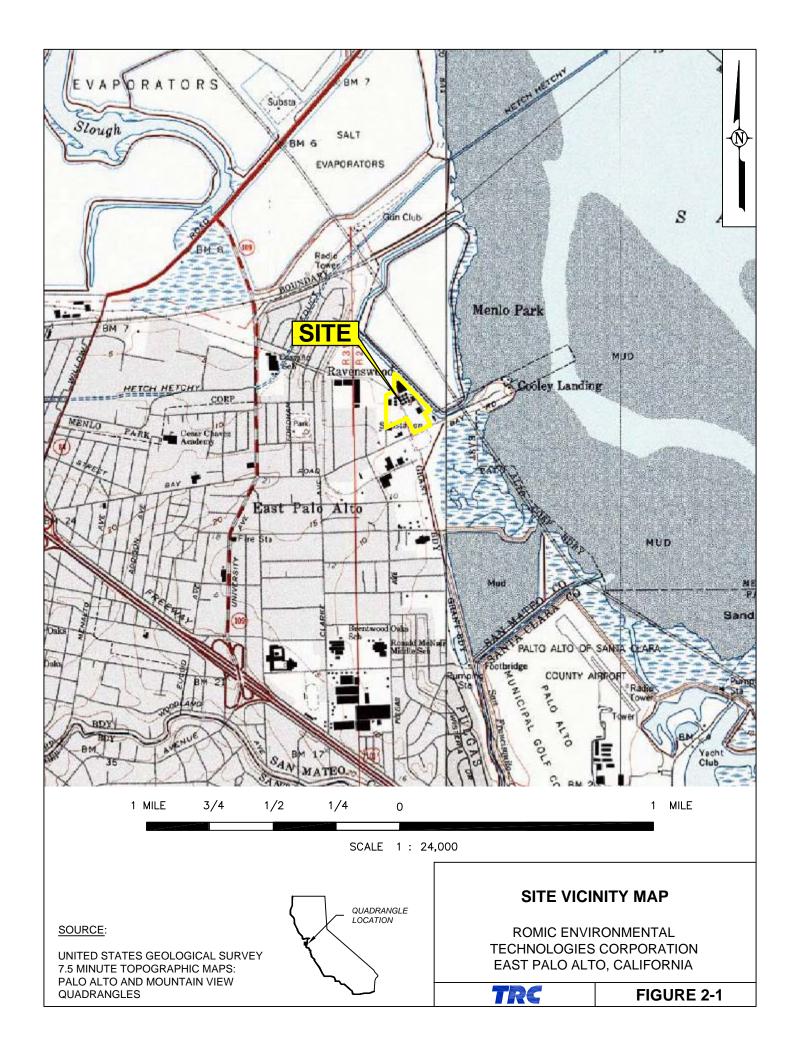
#### AVERAGE PERCENT OF HAZARDOUS WASTE RECEIVED BASED ON THE CALIFORNIA WASTE CODES FOR 1993-2003

CALIFORNIA HAZARDOUS WASTE BY CATEGORIES RECEIVED	CALIFORNIA WASTE CODES	HAZARDOUS WASTE RECEIVED AS A PERCENT OF YEARLY RECEIPTS (1993-2003)
California Solids	151-181,321-491	12%
California Liquids		
- corrosive and inorganic	121-135	18%
- organic	211-311	38%
- waste antifreeze	343	21%
- other wastewater	711-741,791,792	11%

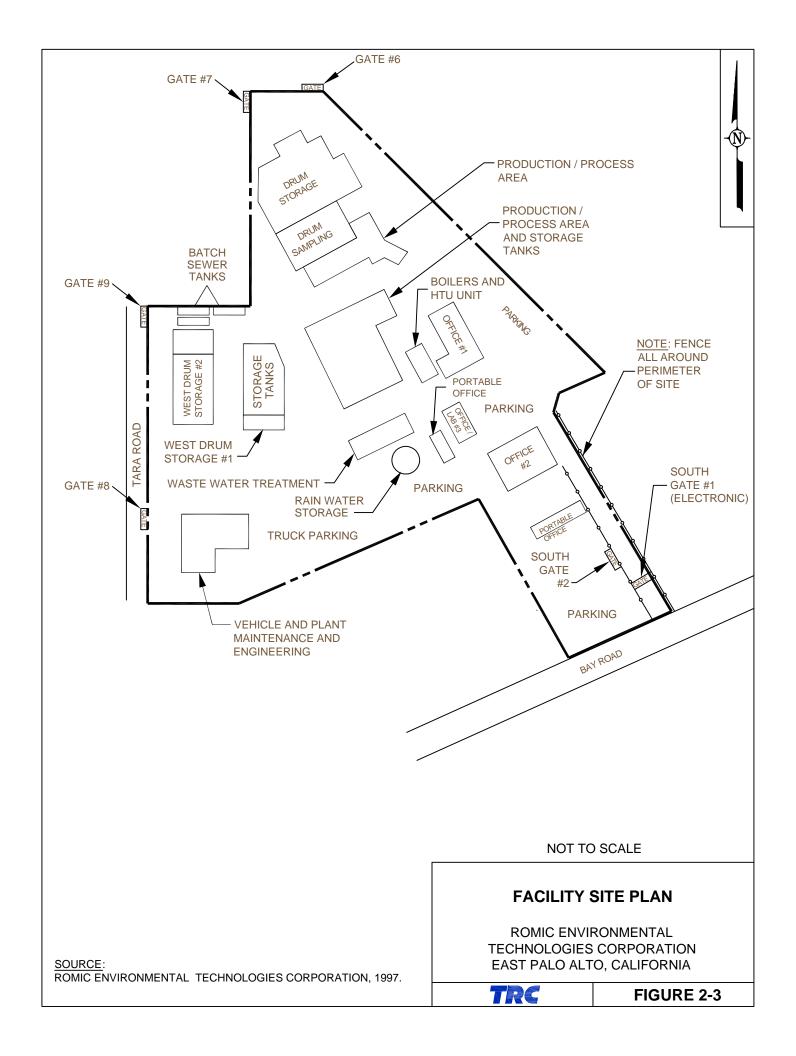
TABLE 2-15

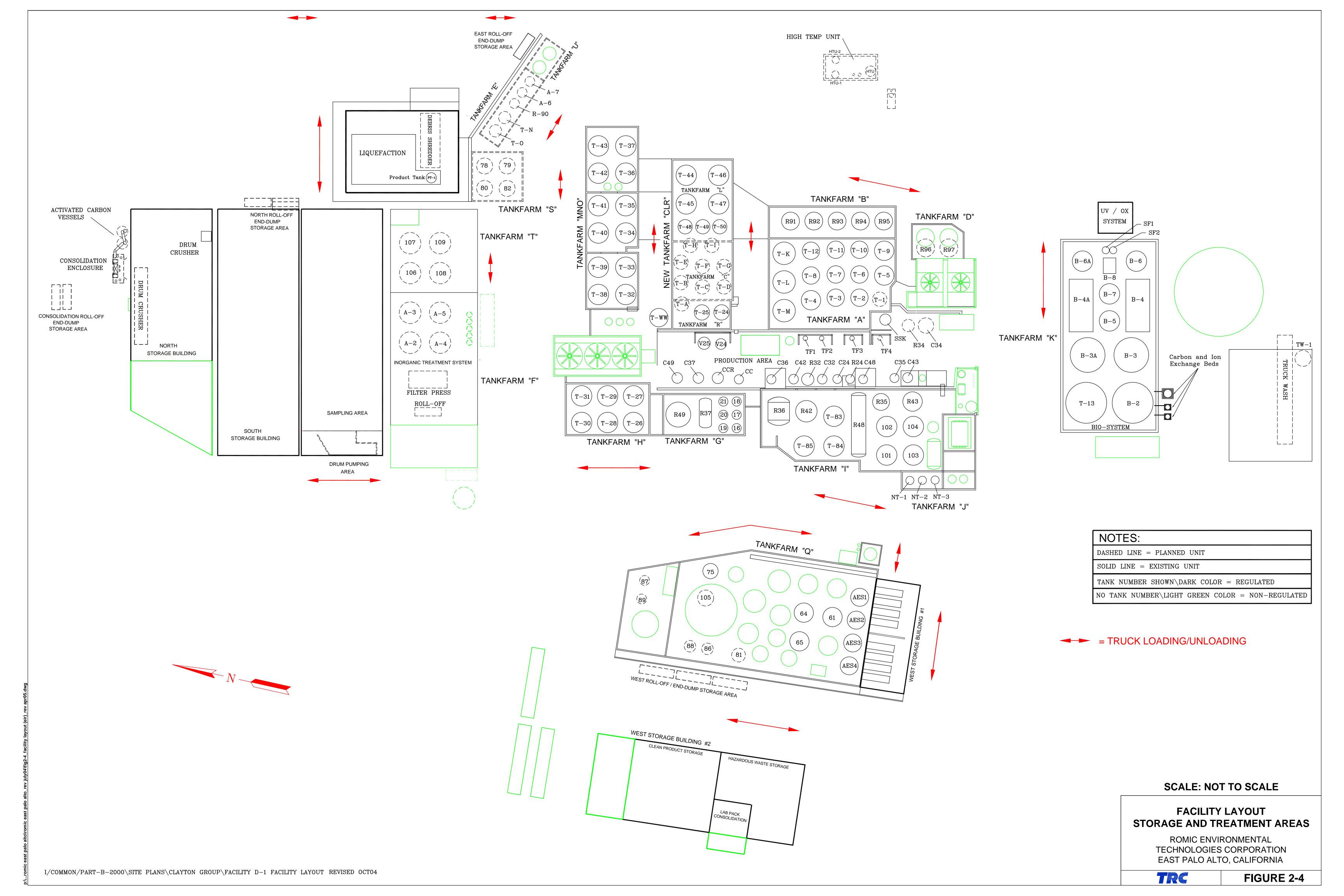
AMOUNT OF HAZARDOUS WASTE SHIPPED OFFSITE
AS A PERCENTAGE OF THE HAZARDOUS WASTE RECEIVED
FOR 1993-2003

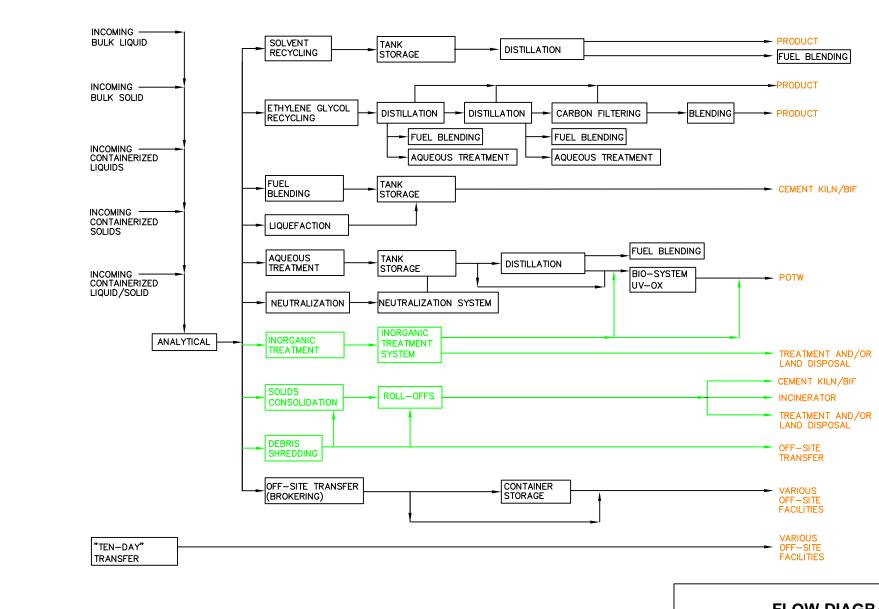
YEAR	TONNAGE OF HAZARDOUS WASTE SHIPPED OFFSITE	TONNAGE OF HAZARDOUS WASTE RECEIVED	WASTE SHIPPED OFFSITE AS A PERCENT OF WASTE RECEIVED
1993	14,316	38,990	36%
1994	15,434	37,554	41%
1995	19,842	37,546	53%
1996	22,421	39,306	57%
1997	19,642	43,593	45%
1998	15,907	40,748	39%
1999	17,406	36,505	47%
2000	18,088	40,051	45%
2001	17,363	33,136	52%
2002	13,146	27,333	48%
2003	14,465	26,393	54%



### **OUTGOING MATERIAL INCOMING WASTE Alternative Fuels** 40% shipped to cement kilns **Water Treatment** 35% reused on site or 55% SOLVENT discharged to sewer **25% WATER Recycled Product** 20% returned to industry 15% OIL & EG\* 5% OTHER Non-Recyclable 5% shipped off site $\odot)(\odot)$ RESOURCE RECOVERY AT ROMIC ENVIRONMENTAL ROMIC ENVIRONMENTAL **TECHNOLOGIES CORPORATION** EAST PALO ALTO, CALIFORNIA \*Antifreeze TRC FIGURE 2-2 SOURCE: ROMIC ENVIRONMENTAL TECHNOLOGY CORPORATION, 1995.







## FLOW DIAGRAM PRIMARY WASTE PROCESSES

ROMIC ENVIRONMENTAL TECHNOLOGIES CORPORATION EAST PALO ALTO, CALIFORNIA

LEGEND
BLACK EXISTING PROCESS
ORANGE OFF-SITE PROCESS
GREEN PROPOSED PROCESS

SOURCE: Romic Environmental Technologies, June 2001.

TRC

FIGURE 2-5

